# NORTHEAST FAIRFIELD TRAIN STATION AREA SPECIFIC PLAN AND EIR

## SCOPE OF WORK

**Overview:**
Approval of the Northeast Fairfield Station Area Master Plan (NFSMP) will require a series of approval actions by the City of Fairfield (City), including a General Plan Amendment, Specific Plan and EIR. Steven Kellenberg, Vice President at EDAW Inc. will be leading the team on this work effort. The following tasks describe the work required to secure approval of the following:

- General Plan Amendment
- Specific Plan
- Revisions to the Zoning Ordinance, as appropriate
- Environmental Impact Report
- Financing Evaluation
- Annexation
- Airport Land Use Commission Review

It is likely that several tentative map and final map applications for development will be sought over a period of several years for discrete phases of project development

Tasks in each phase may run concurrently with tasks in other phases and are not necessarily sequential.

## TASK 1: NORTHEAST FAIRFIELD STATION AREA MASTER PLANNING PHASE – EDAW IRVINE

### TASK 1.1 PROJECT INITIATION

**Subtask 1.1.1 Kick-off Meeting**
The EDAW Principal-in-charge, Master Plan Project Director, and others as appropriate will attend a kick-off meeting with the City to provide for joint and integrated kickoff of the NFSMP process. Meeting topics will include initiation of the planning process for development of the Project Master Plan, the General Plan Amendment, Specific Plan and EIR document, the project description, the scope and treatment of environmental issues, document format, sources of additional information and the project schedule. EDAW will also obtain direction from the Cities Community Development Director and/ or Senior Planner as to both the proper communication protocols between EDAW and the City, and the roles of others in the process.

**Subtask 1.1.2 Site Visit**
Organize and conduct a site visit for the expanded planning team to observe and photograph existing conditions and surrounding context of the subject property. It is assumed that this is combined with the kick-off meeting at the City. Evaluate and map as needed the following:

- General land form and character
- Unique topographical features
- Project area entry sequence characteristics
- General vegetation quality and character
- Unique vegetation features
- Apparent access opportunities and limitations
- Apparent development area opportunities and limitations
- Assessment of existing Train Station SP components (land use, circulation, parks/open space etc.)
- Biological Resource Base Mapping

**Subtask 1.1.3 Prepare / Refine Project Schedule**
Review the project schedule incorporated in this document including sub-tasks and milestone dates for all work products. Refine the schedule based on feedback from the City and consultant team. EDAW will refine the project schedule per City comments and input from consultant team. EDAW will send out refined draft schedule.. If milestones change, EDAW will adjust project schedule to accommodate and reschedule sub-tasks to conform to the new schedule and make adjustments as necessary to finish project on deadline.

**Subtask 1.1.4 Policy and Planning Data Review**
EDAW and other consultant team members will review available existing City planning and policy documents that will influence planning of the property, including but not limited to City of Fairfield General Plan proposals, engineering data and plans, circulation studies and improvement plans, traffic studies / reports, seismic studies, hydrology reports and marketing reports, if any. EDAW and the consultant team will raise questions and develop an understanding of the above data and studies and the issues to be addressed.

EDAW will prepare a list of any additional information required to prepare the Project Master Plan leading to preparation of the GPA, SP and associated application materials. We will coordinate with the City to obtain any applicable City and other agency sponsored studies related to the project and surrounding area including Solano County LAFCO standards & procedures; municipal service Review; Travis AICUZ document and Travis Land Use Compatibility Plan. It is anticipated that Travis AFB will be revising its AICUZ Plan during this planning process and changes will be incorporated into the Plan when available.

**Subtask 1.1.5 Base Map Data**
Using available information provided by the City and the project civil engineer, EDAW will prepare a more detailed base map than used previously appropriate for use in preparing a refined Master Land Use Plan. EDAW and other consultants will research physical and engineering base line data for the project site area, the latest topographic maps and aerial photography. Information and data will be transferred to a CAD mapping system for accurate coordination and future design use. Some items may require State or City lands information, other consultants and/or field exploration. Information mapped will include:

- Topographic mapping at appropriate scales
- Existing roadways and significant structures
- Aerial photography at appropriate scales
- Utility, power line or other easements
- Existing and proposed water resources
- Surface hydrology features and patterns
- Subsurface geology and faults to the extent available
- Soil types, characteristics and limitations to the extent available
- Parcel boundaries
- Adjacent existing conditions
- Adjacent proposed conditions / development
- City Limits
- Sphere of Influence
- ALUC Land Use Compatibility Designations
- City General Plan and Zoning Designations
- 60 CNEL line
- Travis Reserve Line (voter initiative)
- Zone 1 Water systems limits
- Wetlands (delineated or presumed)
- Regional Water Quality Control Board Boundary Lines

- US Army Corps and Dept. of Fish and Game regions
- Biological data from draft Habitat Conservation Plan
- 5 minute response time from existing fire station on Crocker Circle
- Property Ownership Map
- Other data to be determined

Task 1.1 Work Products:
- Kick-off meeting
- Site Reconnaissance
- Project Schedule
- Data Review and Analysis
- Base Map

### TASK 1.2 Site Analysis / Issues Identification

Environmental opportunities and constraints present on the site should guide the development of the NFSMP. To this end, EDAW and other members of the project team will work together to identify factors that should guide the plan to minimize environmental impacts while improving sustainability. This approach is generally referred to as "self mitigation." The opportunities and constraints analysis will be completed before a master land use plan for the Master Plan, General Plan Amendment, Specific Plan and EIR are prepared and analyzed.

#### Subtask 1.2.1 Opportunities and Constraints Analysis

The purpose of this subtask is to validate the team's current understanding of the opportunities and constraints that have guided the planning work to date. EDAW will prepare a draft Opportunities and Constraints Analysis to be reviewed by City staff. Once that review and input is completed, a final version will be prepared. Information considered will include:

- Areas most suitable for development based on topography, access and other factors.
- Relationship drainage and floodplains to potential development
- Evaluate current Vacaville-Fairfield-Solano greenbelt boundary and refine based on results of opportunities and constraints analysis
- Areas within the Vacaville-Fairfield-Solano greenbelt desirable for recreational / public use/habitat
- Most probable and least expensive access and primary circulation routes
- Utility locations and easements (utilizing data provided by the land owners, city engineer, local utility companies or others)
- Adjacent land uses and their implications for on-site development
- Views, visual characteristics and scenic factors
- Key vegetation and habitat preservation areas / bio-resources
- Requirements for public services and facilities (e.g., police, fire, schools, parks, etc.)
- Linkages/relationships between uses within and outside the project area.

As part of the constraints analysis process, EDAW Sacramento will identify service level thresholds for each of the public services required for the plan, including police, fire, schools, water supply/treatment, wastewater treatment, road capacity, etc. In this way, potential service level deficiencies can be identified and addressed in the specific plan and the public facility financing strategy, to the maximum extent possible. This work is budgeted under Task 4.

Task 1.2 Work Products:
- Site issues evaluation
- Constraints analysis report

## TASK 1.3 NORTHEAST FAIRFIELD STATION CONCEPTUAL MASTER PLAN ALTERNATIVES PREPARATION

A conceptual land use plan will be developed for the site by the planning team. This task will evaluate the current Fairfield Station Area Specific Plan as well as the entire expanded study area based on information provided through the opportunity and constraints analysis. Based on the data provided and input received from City staff and consulting team, a general Development Footprint will be established. Then a general carrying capacity will be determined to help define the circulation framework. Capacity issues will be reviewed and capacity improvement options considered as the alternatives are developed. Three alternative land use concepts will be developed followed by the selection of one concept plan by the City Council to serve as the "preferred" concept plan in subsequent refinement steps. This sequence of steps is proposed as a logical sequence in determining the carrying capacity of the site and it's preferred land use pattern. The following tasks describe this process in greater detail:

### Subtask 1.3.1 Development Footprint Analysis

Based on the opportunity/constraints analysis, environmental data, dictated setback and preserve criteria, established land use policy, past studies/findings, joint-city protocols, topographic constraints and other issues to be discovered, a general Development Footprint will be proposed by the planning team. Such a footprint will vetted by the staff and reviewed through the land owner outreach process. This footprint will become the basis of the next task in determining the base carrying capacity of the study area.

### Subtask 1.3.2 Generate "Place-Hold" Land Use Program

Based on the footprint established in the previous task, a general land use program will be developed for the study area. A "bubble plan" of primary uses will be prepared, presented with one refinement assumed. Ideally the land use program would be driven by the market study, but should said study not be available in time, a consensus set of assumptions will be developed and utilized. The market study information will then be used during the plan refinement stage as it becomes available. It is acknowledged that the purpose of this preliminary program is to assist in broad brush circulation, services and infrastructure analysis. It is assumed that as land use alternatives are developed and market analysis made available various permutations will occur in later tasks with adjustment in all systems and components made as needed.

### Subtask 1.3.3 Backbone Circulation Alternatives Analysis

Based on the Development Footprint and Place-Hold land use program, develop several master circulation schemes to serve the site and link to the regional circulation system. Analyze potential options to provide increased circulation through the Master Plan Area and to the major circulation routes including to Interstate 80. Provide to Fehr & Peers, the City Transportation Department and the overall team for evaluation and feedback. Coordinate with F & P for conceptual modeling as needed. Reduce the number of alternative circulation concepts to the extent possible. If multiple concepts need to be maintained they can be incorporated into the next Subtask as needed.

### Subtask 1.3.4 Develop Alternative Land Use Concepts

Three (3) alternative concepts will be prepared with a range of intensity and mix of industrial, commercial, recreation/public facility and residential uses for consideration by the City Council. At least the following will be studied for evaluation:

- Development Footprint alternatives if required indicating the extent of preserved and developed areas
- Master circulation system alternatives if required including refinements to the current Train Station SP and incorporation of alternative modes of local area transit.

- Over-all Mix of land uses and intensities
- Employment area concept plan alternatives (business park, light industrial, general industrial etc.)
- Generalized residential density mix and distribution over site
- Master amenity and recreation component locations
- Location of educational and other public / quasi-public facilities
- Key open space, recreation and conservation concepts
- Relationship/linkages to adjacent areas and internal features

**Subtask 1.3.5 Evaluation by City Council and Selection of Preferred Concept Plan**
After review and refinement by City Staff, landowners and stakeholders (as appropriate), prepare a presentation of the three alternatives for the City Council including statistical analysis and summaries of pros and cons for each alternative. Describe the major trends in TOD, the demographics of future households, the relationship between transit and job creation, and the "ideas" behind each concept. Either present, or support staff in presenting, the concept alternatives and seek guidance towards a preferred plan or combination of plan elements for refinement in subsequent tasks. Provide sufficient background data to Council in advance of the meeting.

Anticipate that a second meeting may be necessary to further refine the preferred alternative within two to three weeks following the initial Council Session. If necessary, conduct this meeting in place of one of the Community Workshops.

Task 1.3 Work Products:
- Conceptual Development Footprint(s)
- Preliminary Carrying Capacity(s) for project area
- Primary / secondary circulation system diagrams (multi-modal)
- Market Data as available to describe trends in household formation, transit oriented development, job creation and discuss how the site can accommodate these trends
- Conceptual land use plan alternatives for review by City Council
- Statistical summaries for all of the above

## TASK 1.4 NORTHEAST FAIRFIELD STATION AREA MASTER PLAN REFINEMENT

Based on input received from City staff, City Council and project team in the preceding tasks, prepare a Refined NFSMP. This will include at least the following components:

**Subtask 1.4.1 Refined Plan Components for Current Train Station Area Specific Plan**
Based on the results of the analysis provided in task 3.1 (Market Study) refinements to the current Specific Plan area will be incorporated. Refinements will most likely include circulation alignments to provide connectivity to the northeast, associated land use parcelization adjustments and open space and park programming and placement. Input from updated soil contamination analysis of certain existing industrial uses may influence final land uses.

**Subtask 1.4.2 Employment Area Concept Plans**
Alternative plan concepts for employment centers including technology park(s), business parks and limited industrial and general industrial uses will be refined from products provided in task 3.1. These concepts will include provision for alternative modes of local area transit (e.g. utilizing abandoned rail spurs). The over-all circulation network and distribution of trips will be refined. Including alternative modes of travel to and from the planned Train Station and to Travis Air Force Base from the planned Train Station

**Subtask 1.4.3 General Residential Densities and Building Typology Proto-typing**
Prior to more detailed studies, residential density ranges and building programming must be refined so that accurate spatial allocations in the plan can be determined. EDAW will work with the market consultant to clarify proto-typical residential density types, alternative mix, grain and allocations within residential neighborhoods. Basic programs will also be ascertained for the support facilities such as employment, office, retail, live/work, public facilities, recreation an others as appropriate.

**Subtask 1.4.4 Residential Density Categories Plan**
The residential density categories derived from specific product types will be defined with the assistance of the market consultant and allocated to individual enclaves within the Master Plan framework. A statistical summary shall be prepared based on proposed residential density categories. Two to three iterations are assumed.

**Subtask 1.4.5 Conceptual Grading Plan**
A conceptual grading plan will be prepared by EDAW for the project site based upon the selected Master Plan Alternative Centerline grades for all roadways will be calculated and approximate grades for development areas established. Intervening drainage, open space /trail corridors will be calculated to insure that development areas are conceptually accurate. Earthwork quantities will be calculated and a conceptual balance will be achieved.

Grading studies will be conceptual only and will need to be verified by the civil engineer. It is assumed that for the envisioned level of design and entitlement, conceptual levels of grading are appropriate and will be refined at the Tentative Map level of engineering. Two iterations are assumed.

**Subtask 1.4.6 Amenity, Educational and Recreational Master Plan**
As a counterpoint to the residential product allocation, this plan identifies all components of the recreation/open space amenity and educational infrastructure. Support facilities will be programmed and located within the Master Plan framework. A statistical summary will be provided for costing and entitlement purposes. Two to three iterations are assumed.

**Subtask 1.4.7 Conceptual Site Plan Studies**
Although detailed site planning will occur on a phased basis in concert with specific phased development applications, in order to understand the character of the project, establish conceptual yield of the development areas, and have illustrative exhibits to communicate the structure and organization of planning areas, conceptual site plan studies will be provided for key community facilities or urban design components to the degree necessary to illustrate their conceptual character. 4-5 conceptual site plan illustrations are anticipated in the scope. Site plan studies will be developed for the following areas at 1'=100' scale or other scale as found appropriate:

- Community / Village Cores
- Neighborhood Centers
- Park and open space hierarchy
- Others to be identified (up to two additional)

**Subtask 1.4.8 Circulation, roadways and open space transition conditions**
Using the refined Master Plan, EDAW will prepare a street hierarchy plan with cross sections for a variety of roadway conditions. Indicate pavement widths, parkway dimensions, common areas, dimensions and setback requirements. Prepare massing and streetscape studies and cross sections for open space transition areas and edge conditions. Indicate building setbacks and scale from street relative to residential densities and anticipated building heights. Maximum slope criteria will be provided. This information will be used by the landscape architect as spatial criteria for conceptual landscape design. Design criteria to be met will be prepared and incorporated in the Specific Plan (see Task 6.1.2 #4)

**Subtask 1.4.9 Ecological Strategy Alternatives**

As a part of the sustainability program development, a set of ecological strategy alternatives will be developed. This work is in addition to the biological studies being provided as part of the EIR baseline analysis. These studies are provided at a conceptual level to inform the master planning process. Components to be considered will include:

- Biodiversity enhancement
- Drainage area reclamation
- Native habitat preservation
- Wildlife corridor enhancement
- Carbon sequestration through reforestation
- Urban forestation

These will be reviewed by the team and evaluated relative to cost, water requirements and ecological value. A preferred alternative will be selected and integrated into the overall refined Master Plan.

**Subtask 1.4.10 Entitlement Support Graphics**

A fully illustrated land use plan and other possible graphic exhibits will probably be needed during the course of the entitlement process. These will communicate the nature and character of the project including open space components, community/recreation facilities, community and village core and other public realm/amenity elements. These may be incorporated into the General Plan Amendment, Specific Plan and EIR document, as well as, community and City presentations. Items may include:

- Overall illustrative site plan
- Open space system illustrative plan

Perspectives:

- Birdseye perspective of community / village / neighborhood cores (3 perspective views)
- Birdseye perspective of overall project (1 perspective view)
- Ground level perspectives of various key places (4 perspective views)
- Animations (one each - ground level and birds eye fly through simulations)

**Subtask 1.4.11 Special Studies**

A variety of additional and special studies will be required but are difficult to determine at this time. Special conditions, plan refinements, revisions based on new information, new plan elements may require additional design effort.

Task 1.4.1 – 1.4.11 Work Products:

- Refined project area Master Plan
- Product and Building Proto-types
- Residential density allocation plan
- Conceptual Grading Plans
- Amenity, Educational and Recreational Master Plan
- Conceptual Site Plan Studies
- Circulation, roadway edge and open space conditions
- Ecological Strategies input to Master Plan
- Illustrative land use plan
- Comprehensive Statistical summaries
- Special Studies

**Subtask 1.4.12 Master Landscape Plan – EDAW Irvine**

A conceptual Master Landscape Plan will be developed with the purpose of establishing a landscape and hardscape site framework integral to the Conceptual Master Plan. The following outline identifies tasks performed as part of the Landscape Master Plan preparation:

1. Site Reconnaissance – An EDAW Landscape Architect will visit the site to observe and photograph existing conditions and the surrounding context from a Landscape Architectural point of view.

2. Site Opportunities and Constraints – based upon information and documents provided by the City and the information gathered during the site reconnaissance, EDAW will define opportunities and constraints including site features and context, climatic influences, pedestrian and vehicular circulation systems, landscape planting, encumbrances, easements and view corridors for use in the preparation of the Master Landscape Plan.

3. Conceptual Landscape Diagrams – EDAW will prepare a Conceptual Landscape Diagram that indicates the landscape structure for the site with consideration for vehicular, bicycle, equestrian and pedestrian circulation through the site. Allow for three (3) iterations for landscape vision based upon alternative land use planning diagrams.

4. Master Landscape Plan – EDAW will prepare a Master Landscape Plan with an emphasis on site related elements including vehicular and pedestrian circulation, parking areas, gathering places, conceptual grading, hardscape, site structures, fountains and water features, special features, monuments and gateways, conservation areas, landscape planting and signage. Allow for one (1) final iteration based upon selected landscape vision and land use planning diagram.

5. Sections – EDAW will prepare a maximum of twelve (12) sections to support and clarify the Master Landscape Plan.

6. Design Imagery – EDAW will provide color photographic images of built projects that indicate the project's proposed landscape character. Allow for three (3) sheets at 30" x 42".

7. Plant Palette – EDAW will provide color photographic images of the proposed trees, shrubs and ground covers.

8. (Not needed at this stage of Master Plan Process)

9. Project Management and Coordination – provide project management and coordination with client and team members through this phase of work.

Sub Task 1.4.12 Work Products:

- Site Opportunities and Constraints Diagram (freehand drawn and colored)
- Conceptual Landscape Diagrams (freehand drawn and colored)
- Master Landscape Plan (freehand drawn and colored)
- Sections - maximum of twelve (12) (freehand drawn and colored)
- Design Imagery (color photographic images)
- Plant Palette (color photographic images)
- Conceptual Statement of Probable Construction and Maintenance Costs

**Subtask 1.4.13 Landscape Sustainable Site Development / LID Assistance**

Although the water balance planning will address water on a community-wide integrated systems basis, this task focuses on the potential methods of water treatment at an individual site level. Low Impact Development (LID) techniques shall be inventoried, discussed and evaluated for their conceptual impact on overall storm water systems and their potential to reduce both total and peak volumes. Although this component is not modeled in SSIM, assumptions can be made for storm water reductions that can be an input into the storm water model. Develop low impact design criteria that meet Regional Water Quality standards, including any standards for lakes and water retention basins.

A. Explore and evaluate Low Impact Design measures for site related elements. The following sustainable systems will be explored and presented on a diagram:
    1. Porous pavements
    2. Parking lot recharge systems
    3. Bio-filtration methods for consideration at a neighborhood and village level
    4. Vegetated storm swale systems
    5. Integrated water cleansing basins
    6. Integration of drainage and bio-diversity components
    7. Reduced curb and gutter conditions
    8. Storm water capture in ponds

B. Identify and evaluate other components of sustainable site design. These items are not modeled on SSIM but can be studied for cost, environmental benefit and market/builder acceptance. These findings will be presented on a diagram.
    1. The need for and use of irrigation in a new community context
    2. Reduced water landscapes, if appropriate (consistent with market expectations)
    3. Renewable hardscape materials
    4. Recycled materials
    5. Low albedo materials to reduce urban heat island
    6. Low energy, low impact pedestrian lighting systems
    7. Working landscape concepts such as agriculture or community gardens
    8. Landscape concepts for increased bio-diversity

C. Provide conceptual cost impacts of the Low Impact Design elements with the assistance of the project civil engineer (civil engineer costs not included).

D. Develop a brief summary text and/or chart document that explains the modeling approach taken, the findings and recommendations.

E. Establish plant lists for use in association with good, better and best water use levels established by the Water Strategies/Modeling in SSIM.

F. Provide conceptual cost impacts associated with the good, better, best water use levels.

Sub Task 1.4.13 Work Products:

- Low Impact Design Components Diagram
- Sustainable Site Design Components Diagram
- Conceptual Cost Analysis – Low Impact Design
- Low Impact Design Written Analysis / Summary
- Plant Lists – Good, Better, Best Water Levels

- Conceptual Cost Analysis – Good, Better, Best Water Use Levels

**Subtask 1.4.14 Landscape Meeting Attendance**

- Attend one (1) City Council / Planning Commission Hearing; assumed to be in Fairfield.
- Attend City / Team Meetings (allow every 3 wks / over 24 months = 9 mtgs = 72hrs); assumed to be in Fairfield.
- Attend two (2) Joint Sessions / Meetings with City during Landscape Master Plan preparation; assumed to be in Fairfield
- Attend / Participate in Internal Team Meetings/Telecon Calls (allow every 3 wks = 20 times x 1.5hrs each)

### TASK 1.5 COMMUNITY PARTICIPATION - EDAW

**Subtask 1.5.1 Community Workshops**

Support the City of Fairfield in conducting community workshops. Four community workshops are provided for per the request of the City. These will be scheduled at key decision points (see project schedule) These community workshops will serve as the method to provide information, identify planning issues and opportunities, and gather feedback on alternatives from stakeholders and the broader public. The input from the workshops will be summarized and made available to decision makers as the plan progresses. For each community workshop, EDAW will:

- Prepare and mail a simple post card invitation (black/white, 500 copies), using mailing list provided by the City.
- Prepare workshop logistics plan and agenda.
- Facilitate workshop including EDAW Public Participation Leader with consultant team support and reliance on City staff for assistance with registration table, small group discussions, etc.
- Prepare workshop summary in memo format, including synthesis of major themes from the input.

**Subtask 1.5.2 Community Participation Graphic Support – EDAW**

Graphics and community participation materials will be provided as needed. The labor costs anticipated to cover this work is reflected in the detailed project budget. Coordination will take place with the City staff regarding schedule, content and logistics. This budget is separate from Special Studies (Subtask 1.4.11)

## TASK 2: SUSTAINABILITY PROGRAM – EDAW IRVINE

**Overview:**

Across the country there is a growing awareness of sustainability; in particular, climate change and water use. In a number of states, fundamental strategies and criteria for urban form, transportation, water utilization and building energy are being reconsidered and redefined. This is due in general to the growing concern about global warming, and more specifically, emerging legislation at the state and national level which will eventually lead to specific mandates for Greenhouse Gas (GHG) reduction at some level. What ever the final form of these new development criteria, the result will certainly be an increased pressure to plan new communities with reduced carbon and water footprints and a greater sensitivity toward ecological resources.

Due to emerging new regulations, specifically AB32 and SB375, new, large scale developments must monitor and strategize carbon footprint from inception. The general goal of this legislation will be to demonstrate a 30% greenhouse gas reduction from baseline (back to 1990 levels). The SSIM

process answers the question: what does it take at a conceptual level to meet this goal and what is the most cost efficient combination of measures. Early up-front integrated sustainability in the land planning process will allow the team to achieve the optimum land use mix, transportation measures, attention to passive solar orientation and reduced total water use through whole systems modeling. The solution sets identified through this sustainability effort provide input to the specific plan (at a general level) and more importantly climate change mitigation measures for the EIR. More detailed, product specific modeling will occur later during Phase 1 plan refinement. .

The Fairfield sustainability program is envisioned as a multi-step process utilizing the latest modeling and cost/benefit analysis techniques to construct a sound, defendable and affordable whole systems sustainability strategy. The goal is to provide the highest level of defensibility and accountability that the current state of the art provides. Core Themes to be addressed include mobility, building energy, public realm energy, domestic water, green building, urban heat island, ecology and carbon footprint while balancing the aspects of economic, social and environmental health. Through this process, Fairfield will:

- Develop a quantified, defensible basis for carbon, water and other sustainability representations in the entitlement and environmental process.
- Optimize the environmental value of the sustainability program.
- Minimize cost relative to the benefits achieved.
- Develop a low-carbon development strategy.
- Achieve exemplary status (within the region) as a sustainable project.

**We will provide the following categories of services;**

**TASK 2.1: EDAW Managed Sustainability 1-day Workshop**

EDAW will conduct a two-day interactive Sustainability Charrette that will consist of a brainstorming session, focused presentations of sustainability themes, and a series of breakout sessions focused on components of the project sustainability plan. These specific components include topics such as: Water, Energy, Transportation, Site/Landscape, Green Building, etc. The opening session will include a discussion of “guiding principles” to serve as a catalyst for the breakout session discussions. During these sessions the group will work to identify the base case and two target benchmarks for higher levels of resource efficiency – “better” and “best” – of each component. Topics will be discussed in relation to: conceptual cost, feasibility, and implementation. EDAW’s sustainability team will include a water, energy and transportation expert for the charrette. This Scope of Work includes the costs of participation by the water, energy and transportation expert, as well as EDAW team members. This charrette will not create a complete sustainability program but will identify major themes, additional areas for research, and an approach to the development of a sustainability program.

Subtask 2.1 Work Products:

- Sustainability Charette PowerPoint
- Benchmarking Matrix with Good, Better and Best Categories
- Sustainable Case Studies Matrix on a National and Regional Level

**TASK 2.2: Core Theme Research and Modeling**

This task identifies for each of the good/better/best targets set by the project team and how those targets can actually be achieved. In most cases this is through dynamic modeling performed by industry experts within the EDAW sustainability team. The modeling will identify sets or “packages” of project design features that achieve each Core Theme target at the lowest cost. In

some cases it is difficult to quantify either the environmental benefit or the cost, but sufficient data will be provided to guide the City and team toward an informed decision. The outputs of this task will provide input into SSIM and subsequent gaming toward an optimized Master Fairfield Sustainability Program.

**Task 2.2.1: Review Project Data and Previous Studies**

Line item budgets have been established for the primary research and modeling efforts: residential building energy, non-residential building energy, public realm energy, urban heat island, water, transportation and green building.

A certain amount of data on the site and master planning process has already been provided. A review of materials prepared for the Fairfield Station Area Specific Plan by Dyett and Bhatia will be provided. Materials for review to be provided to Edaw by the City. As each of the sub-teams initiate evaluation of their focus area, additional data will need to be gathered and collated. City shall assist in coordination with consultants to provide technical studies related to infrastructure systems including domestic water, waste water, transportation, drainage, biological resources and others that may be identified during the course of the scope. Transfer selected data to a CAD mapping system as needed for accurate coordination and future analytical use. Some items may require other consultants to provide at costs outside of this scope only to the extent required and upon prior approval by the City.

Subtask 2.2.1 Work Products:

- Summary list of additional information or clarification related to previous studies

**Task 2.2.2: Building Energy Measures/Modeling**

There are two fundamental approaches to reducing energy impacts on the environment. The first is reducing the need for energy; the second is supplementing conventional sources with cleaner, renewable energy sources.

The energy team will explore reduction in energy requirement, at a conceptual level, by modeling a variety of Energy Conservation Measures (ECMs) and identifying the potential energy savings associated with each. This will include ECMs associated with:

- Improved Building Envelope Standards
- Improved HVAC Efficiency Standards
- Improved Facility Lighting Control Standards
- Improved Hot Water Heating Standards

The building energy sub-team will include Davis Energy Group, Davis, CA, and DMJM H+N, Orange, CA, (both included in scope) which will model up to four residential building types and three commercial/industrial building types. A maximum of 5 variables will be modeled for each building type.

The energy model will provide output in the form of anticipated annual electrical and gas consumption as well as a cost/benefit analysis which will indentify the percentage of GHG reduction per $1000 invested for each good/better/best package. This information will provide input which will allow synthesis into an optimized master carbon/water reduction program.

Subtask 2.2.1 Work Products:

- See Tasks 2.2.3 and 2.2.4

**Task 2.2.3: Residential Energy Building – Davis Energy Group**
Davis Energy Group (DEG) out of Davis, CA will be the primary modeler for the residential building types. A local/regional green building consultant will also be on the team to validate measures and costs relative to the Fairfield market and building industry practices. The DEG scope of work will include at least the following tasks:

A. Identify ECMs for four levels of energy use: base case (BAU), good, better and best based on the targets identified in the initial sustainability workshop. Test the proposed ECMs for effectiveness in achieving the targets. Adjustment to the ECMs will be made to best achieve the targets at the lowest possible cost. Specific focus will be on achieving a PV strategy that achieves a net positive, day one cash flow for the homebuyer in the 'Better' scenario.

B. Provide the above modeling for the following building types that are already within the SSIM building portfolio and have been previously modeled by DEG.

1. *Single Family Residential – Large – 3,700 sf*
2. *Single Family Residential – Small – 2,100 sf*
3. *Townhomes – three story – 1,600 sf*
4. *Condominiums – three story – 1,200 sf*
5. *Low-rise Mixed Use – three-story – 850 sf/ground floor retail*

It is understood that this building array will not match exactly the product mix envisioned for Fairfield and that the actual proposed product mix will be extrapolated/averaged to align with these building types in the spirit of cost containment. The SSIM team is happy to match product types proposed by Fairfield, **but should changes need to be made in this residential array to do so or additional buildings added, modest adjustments in the modeling budget will be required.**

Subtask 2.2.3 Work Products:

- Conceptual cost estimates for each package of ECMs
- Collaborate with a regional green building consultant and/or a regional cost estimator to help validate the strategies and costs
- Summary text document will be prepared that explains the modeling approach taken, the findings in table and chart form and a summary of findings and recommendations.
- Participate in at least one (in addition to the initial workshop) face to face meeting as well as 3-4 conference calls/webex meetings

**Task 2.2.4: Non - Residential Energy Building – DMJM H+N**
DMJM H+N out of Orange, CA will be the primary modeler for the non-residential building types. A local/regional green building consultant will also be on the team to validate measures and costs relative to the Fairfield market and building industry practices. The DMJM H+N scope of work will include at least the following tasks:

A. Identify ECMs for four levels of energy use: base case (BAU), good, better and best based on the targets identified in the initial sustainability workshop. Test the proposed ECMs for effectiveness in achieving the targets. Adjustment to the ECMs will be made to best achieve the targets at the lowest possible cost. Specific focus will be on achieving a PV

strategy that achieves a 10 year amortization given a market acceptable green revenue premium.

B. Provide the above modeling for the following building types that are already within the SSIM building portfolio and have been previously modeled by DMJM H+N.

1. *Office Low Rise – three-story – 75,000 sf*
2. *Office/retail Mixed Use – four-story – 120,000 sf*
3. *Industrial – one-story – 53,000 sf*
4. *Retail – Suburban – one-story – 25,000 sf*

It is understood that this building array will not match exactly the product mix envisioned for Fairfield and that the actual proposed product mix will be extrapolated/averaged to align with these building types in the spirit of cost containment. The SSIM team is happy to match product types proposed by Fairfield, but should changes need to be made in this non-residential array to do so or additional buildings added, modest adjustments in the modeling budget will be required.

Subtask 2.2.4 Work Products:

- Conceptual cost estimates for each package of ECMs
- Collaborate with a regional green building consultant and/or a regional cost estimator to help validate the strategies and costs
- Summary text document will be prepared that explains the modeling approach taken, the findings in table and chart form and a summary of findings and recommendations
- Participate in at least one (in addition to the initial workshop) face to face meeting as well as 3-4 conference calls/webex meetings

**Task 2.2.5: Regional/Local Verification – Building Advisory Services**

A local green building consultant(s) such as Jeff Jacobs of Building Advisory Services will be retained by EDAW as part of the team to vet findings and recommendations generated by DEG and DMJM H+N. This consultant(s) will provide the following verification and review services:

A. Review existing master plan and other technical studies to ascertain a reasonable background of information regarding the Fairfield project and its components.
B. Review the methodology and ECM's proposed by the modeling team and provide comments and input the "fit" into the region and building industry.
C. Review the costs for ECM's developed by the modeling teams engage in sufficient research to assist in validation and refinement of said costs.
D. Review other aspects of the green building program developed through the EDAW sustainability scope and provide comments relative to regional "fit" and cost implications.

Subtask 2.2.4 Work Products:

- Participate in at least one face to face meeting and 3-4 conference calls/webex meetings
- Brief summary of finds and observations relative to the material reviewed.

**Task 2.3: Public Realm Energy – EDAW**

As with building energy, a base case and three scenarios of increasing efficiency will be developed for pubic realm energy. This includes street lighting, parking lot lighting and energy

used in the parks and open space system. The scenarios will explore various levels of "dark sky" night lighting concepts, the intensity of street light distribution and the use of new lighting technology such as LED. Safety is the highest priority of public lighting and will not be compromised for energy savings.

The EDAW team will require assistance from the project civil engineer (not included in scope) to help ascertain the base case scenario and interpret local street lighting regulations.

The team will provide output in the form of anticipated annual electrical consumption as well as a cost/benefit analysis which will indentify the percentage of GHG reduction per $1000 invested for each good/ better/best package. This information will provide input into Task 3 which will allow synthesis into an optimized master carbon/water reduction program.

Subtask 2.3 Work Products:

- Public realm energy summary of electrical consumption on a BAU and good, better and best basis
- Cost/benefit analysis

**Task 2.4: Water Strategies/Modeling – EDAW**

Working with the projects existing consultants, EDAW Fort Collins will provide modeling for sustainable strategies related to the domestic water system and its interaction with other water systems. Consideration will focus on the items noted below that were identified in the initial sustainability workshop. The process includes modeling and evaluation for some of the following components: treated return effluent, storm water recapture, rain water harvesting, grey water use and double/triple plumbing of homes. The water team will utilize a Whole Systems Water Balance Model to evaluate the water conservation and reuse strategies identified in the workshop.

The team will provide outputs in the form of alternative water reduction strategies as well as a cost/benefit analysis which will indentify the percentage of water reduction per $1000 invested for each good/better/best package. This information will provide input into Task 3 which will allow synthesis into an optimized master carbon/water reduction program.

The EDAW Fort Collins scope of work will include at least the following tasks:

A. Gather data related to the proposed domestic water system, storm drainage system, waste water treatment system and current demand/capacity data from the project civil engineer (existing civil engineer labor not included).

B. Identify demand quantities and reduction measures for four levels of water use: base case (BAU), good, better and best based on the targets identified in the initial sustainability workshop.

C. Evaluate and test the following proposed measures for effectiveness in achieving the targets. Adjustment to the measures will be made to best achieve the targets at the lowest possible cost.

    1. *High efficiency building fixtures*
    2. *Maximization of ground water recharge*
    3. *Low water landscape palettes (consistent with market expectations)*
    4. *Landscape irrigation technologies that reduce water waste*
    5. *Measures that would reduce waste treatment demand*

6. *Returned treated effluent for public/common areas*
7. *Storm water recapture in ponds and potential reuse*
8. *Other measures that are identified during the progress of work*

Subtask 2.4 Work Products:

- Summary of reductions in domestic water demand will be calculated using EDAW's whole system water planning sub-model with results imputed into SSIM
- Conceptual cost impacts of the various scenarios with the assistance of the projects civil engineer (civil engineer costs not included)
- Summary text document that will be prepared explaining the modeling approach taken, the findings in the table and chart form, and a summary of findings and recommendations
- Participate in at least one (in addition to the initial workshop) face to face meeting as well as 3-4 conference calls/webex meetings.

**Task 2.5: Sustainable Transportation Strategies – Fehr & Peers**

See transportation section of scope (Task 4.14) which includes the sustainable transportation strategies.

**Task 2.6: Strategies for Ecosystem Services - EDAW**

See ecological Strategies Alternatives scope Section (Task 4.1.9).

**Task 2.7: Green Building**

In addition to water and energy, other components of green buildings need to be addressed in developing a comprehensive sustainability program. Builder design criteria for indoor environmental quality, natural ventilation and lighting, use of renewable resources, local material sourcing, building design efficiencies and construction waste management may need to be evaluated for cost and market acceptance.

A. EDAW will review and evaluate the opportunities and issues related to green building programs in the regional and Fairfield builder environment and make preliminary recommendations on realistic measures to be considered.

B. As with the other Core Themes, a good/better/best scenario will be developed for both production residential and non-residential buildings. These benchmarks will be drawn from regional building programs and/or LEED certification programs. It is not the intent that the project or the building be officially certified, merely that these programs provide a good basis and indexing for green building enhancements.

C. EDAW will evaluate options for construction waste landfill diversion and recycling. Regional operators will be contacted and several strategies will be defined and costed.

D. Each package of measures will be cost assessed with the assistance of a regionally-based cost estimator (included in scope) that has intimate knowledge of the impact of green building enhancements to the direct costs of production building.

E. A workshop will be set with two of the local/regional builders

F. The EDAW green building team will utilize expertise from the EDAW Irvine office and a regionally based expert to insure that recommendations and costs are constant with

regional building practices. This information will provide input into Task 3 which will allow synthesis into an optimized master sustainability program.

Subtask 2.7 Work Products:

- Summary PowerPoint Presentation
- Green Building Good, Better, Best Program and Matrix
- Cost summary matrix
- One workshop with local builders

**Task 2.8: Sustainable Site Development / LID – EDAW**

See landscape section of scope (Task 1.4.13) which includes the sustainable site development/LID strategies.

**Task 2.9: Master Sustainability Program Alternatives and Synthesis – EDAW**

The team will utilize EDAW's SSIM (Sustainable Systems Integrated Model) to combine the individual components (i.e. water, energy, transportation, etc.) into a comprehensive, all-systems program that measures total environmental benefits and costs for at least three Fairfield sustainability program alternatives. The model will calculate total environmental and carbon footprint of each alternative as well as allocate costs to various project cost centers. Outputs will allow easy comparison of the various Core Themes and those mitigation measures with the highest return on investment relative to water and carbon reduction.

**Task 2.9.1: SSIM Gaming and Program Synthesis – EDAW**

A. From the data developed in the previous task, select good, better or best packages for each Core Theme and combined into a candidate Master Sustainability Program. Repeat for a total of at least three master program alternatives.

B. After selection of the Core Theme packages for each Master Program, utilize SSIM to calculate the following for each Master Program alternative:
   1. Total domestic water savings
   2. Total energy savings
   3. Total reduction in storm water outflow
   4. Total reduction in VMT
   5. Total reduction in GHG emissions
   6. Total initial costs
   7. Total on-going monthly costs

C. On the basis of this information, further gaming of Core Theme package combinations will repeat until a Master Program is defined that is consistent with the goals, business plan and financial model of the City. A total of three iterations of the Master Program set is assumed.

D. As a part of the evaluation of Master Program alternatives, various schemes for cost allocation will be developed and reviewed with the team and City. The following cost allocation categories will be defined and incorporated into the analysis:
   1. Increased cost and/or savings to residential building construction in cost/sf and % over base costs
   2. Increased cost and/or savings to non-residential buildings in cost/sf and % over base costs
   3. Increased cost and/or savings to master developer

4. Increased cost and/or savings to third part energy or infrastructure entity
5. Increased cost and/or savings to Master Home Owners Association

Subtask 2.9.1 Work Products:

- Summary PowerPoint Presentation of synthesis outputs

**Task 2.9.2: Preferred Program Selection and Refinement – EDAW**

A. Based on the data developed in the previous task, a preferred Master Program of sustainability measures will be selected. This program will represent a balance between potential additional cost and the degree of environmental benefit. This Master Program will represent key measures related to:
   1. energy conservation for residential and commercial/institutional buildings
   2. building integrated renewable energy
   3. public realm energy conservation and renewable energy
   4. water conservation and reuse
   5. multi-modal transportation programs
   6. green building components
   7. ecological conservation and enhancement schemes

B. A key goal of this level of modeling will be to determine the feasibility of achieving a reduced carbon footprint. There are numerous opportunities for reducing GHG emissions from building and site operations through integrated design, energy efficiency, and use of renewable energy. The team will conduct an analysis of greenhouse gas impacts that the development emits during its construction and operation and craft the Master Sustainability Program options in light of reducing those impacts. In order to achieve the most cost effective strategy for carbon reduction, calculations will be performed to establish total conceptual cost and cost per ton of CO2 reduced for each Master Program.

Subtask 2.9.2 Work Products:

- Revised summary PowerPoint Presentation of revised synthesis outputs

**Task 2.10: GREENHOUSE GAS EMISSIONS CALIBRATION – EDAW**

Since one of the values of this scope is to evaluate the Fairfield carbon footprint, GHG emissions formulas need to be calibrated with the local conditions. The Sacramento office of EDAW is on the forefront of GHG emissions calculation methodology. Although SSIM is already programmed with an GHG emissions calculator, the Sacramento office will be requested to:

A. Research local Fairfield power characteristics including percentages of each generation type.
B. Research vehicle fleet characteristics for the region and provide factors for the emissions calculator.
C. Update the team on the latest progress in emissions methodology at a national or state level.

Subtask 2.10 Work Products:

- Summary PowerPoint of GHG emissions calibration

**Task 2.11: Sustainability Program Documentation**

A. Based on the preceding tasks, develop a summary booklet documenting the findings of the process and summarizing the Fairfield Master Sustainability Program. Include the

recommended benchmarks as well as practices and technologies required to achieve the plan goals.

B. Summarize all model runs, initial and life cycle cost analysis and cost/benefit analysis that has been prepared during the effort to date.

C. Document in matrix form the green building, water and energy criteria to be considered for incorporation into Builder Guidelines (detailed guideline package not included in this scope).

D. Include a section entitled "Next Steps" to address implementation and recommended institutional structure to sustain the program.

E. Two rounds of comments and revisions are assumed.

Subtask 2.11 Work Products:

- Summary document and PowerPoint of SSIM process and results. (3 hard copies and PDFs)

**Task 2.12: Financial Strategies for Sustainability – Schweitzer + Associates, LLC**

New strategies for financing green communities or specific project design features related to renewable energy are being developed by both financial institutions and manufactures. In preparing a cost/benefit analysis for the project, these financing mechanism should be identified and discussed as they may provide add opportunities for a higher level of carbon footprint reduction.

Judi Schweitzer of Schweitzer & Associates is a leading expert in financial and economic strategies related to sustainable development. She will function as an advisor to EDAW/Fairfield in this process and assist in identifying financing strategies that may lower the first cost of selected project design features, particularly in the area of renewable energy.

**Task 2.13: Project Management/City Meetings/Conference Calls**

Project duration for SSIM is assumed to be approximately four to five months. The meeting budget includes 6 City/ team meetings, 6 City/team conference calls and internal working sessions.

Final documentation is anticipated shortly after the master program selection and final SSIM model runs. **Should the time and effort required to provide support exceed this assumption, additional budget may be required.**

## TASK 3: MARKET ANALYSIS / FINANCING PLAN & FISCAL ANALYSIS EDAW

**Task 3.1 Market Analysis**

The market analysis will answer three primary questions for the project:

1. Does the inventory of available land within the City of Fairfield's city limits meet the city's ongoing growth needs to accommodate industrial, commercial, and residential development.
2. What is the optimum mix of land uses and what are the potential users for industrial space

placed at Fairfield Station.

3. Approximately how fast will the planned community sell or lease and how much will it sell for?

These three questions will serve to meet the LAFCo market analysis requirements for annexations in Solano County and provide important inputs for the fiscal impact analysis and financing plan. The market inputs will give the financial analysis projections of land values, property tax proceeds, sales tax, and business license fee revenue estimate to understand the net fiscal balance to the City of Fairfield during absorption. It will also inform the land use plan and provide a strategy for phasing of development.

The market analysis will track the current land inventory within the City limits, evaluate building permit activity, and track demand for residential densities, internal capture of commercial space, and supportable demand for industrial space. In addition, the market analysis will determine the premiums generated as both a transit village, a rail logistics corridor, and as a sustainable community.

The market analysis will focus on five important components for attracting homebuyers and employers to Fairfield Station:

- As a sustainable community, offering a unique lifestyle with proximity to a major regional transit node.
- As a community with access to open space and natural areas.
- As a potential rail logistics support facility and support facility for Travis Air Force Base
- As a community accessible to two major employment areas, Sacramento and San Francisco
- As a community able to support its own neighborhood retail demand.

EDAW will determine the market depth of these four components using three market research strategies.

A. The first is evaluating economic and real estate trends in the primary and secondary housing markets to understand demand for a mix of housing types at Fairfield Station, recognizing short-term declines in the housing market versus long-term household formation and employment growth trends. Fairfield Station's location advantages present an opportunity for transit-supportive uses. As such, EDAW's Sustainable Economic Group will research comparable housing and commercial real estate markets of other transit oriented communities in Solano County, Yolo County, and other transit centers in the greater Bay Area.
B. The second is evaluating the extent of retail demand that can viably be placed within Fairfield Station and what time in the development could retail be supported.
C. The third is determining the strength and type of industrial and business park real estate opportunities by focusing on potential synergies with the rail line and Travis Air Force Base but also recognizing its distance and lack of visibility from Interstate Highway 80. Describe the industries and businesses that could potentially relocate to the Master Plan Area.
D. The fourth is evaluating the site as potential rail logistic center link to a major rail freight corridor to support distribution, warehouse, and manufacturing with access to the Port of Oakland and improved access to mid-west and eastern distribution centers.

Upon completion of its analysis, EDAW will draft a market analysis presentation, providing unit mix, pricing, commercial program, industrial space demand and likely industrial space users, and target buyer recommendations, as well as a projection of annual absorption. Included in the

market analysis presentation will be accompanying background materials and a description of sources and methodology.

### Subtask 3.1.1 Project Start-Up and Review of Background Materials

EDAW's economics team will meet with Fairfield Station's project manager and identified partners to discuss the market analysis scope, schedule, available background materials, and overall market analysis goals, including LAFCo staff, the City of Fairfield Economic Development staff, and Fairfield planning staff. The team will also discuss the geographic parameters for primary and secondary housing, commercial, and industrial market areas to perform EDAW's real estate market research and the LAFCo market analysis. The market areas will include the City of Fairfield overall and other urban areas with similar rail assets or developments focused on sustainability.

The team will identify key informants that EDAW will interview as part of the market analysis. EDAW will review all relevant materials prior to initiating its evaluation of local and regional real estate market trends.

### Subtask 3.1.2 Evaluate Economic and Real Estate Trends in the Primary Market Area

Regardless of the larger regional reach envisioned for Fairfield Station, a market analysis should always evaluate market trends in the primary market area. As such, EDAW will perform a full review of prevailing economic, demographic, and real estate market conditions in Fairfield and Vacaville. This section will also review the supply of land within the City limits as part of the LAFCo market analysis, accessing the City's updated inventory of available property. The analysis will include:

- Evaluating local employment and business conditions (i.e. employment growth, unemployment, occupation distribution, job growth by industry category, taxable sales, and business establishment conditions).
- Researching and analyzing population and household trends (i.e. population and household growth, household size, age distribution, household formation, household income, per capita income, educational attainment, percent of population retiring, and commute behavior).
- Analyzing real estate trends in Fairfield and Solano County overall (i.e. prevailing home prices for new and existing housing product by housing type, absorption, vacancy and lease trends of commercial and industrial supply, home building trends, second-home ownership trends, inventory of foreclosed homes and the preponderance of subprime lending, home financing conditions, planned and proposed development in Fairfield and large scale developments in the surrounding market area, new home sale absorption, and existing housing inventories).
- Determine the inventory of residential, commercial, and industrial land in Fairfield and understand the inventory's ability to reasonably accommodate projected growth over the 10-year period.
- Projecting future housing and commercial growth based on historic growth trends, employment growth, commute patterns, income growth, absorption, retail spending trends, and available planning projections of household and employment growth in Fairfield.
- Evaluate retail purchasing power conditions within Fairfield as well as project the purchasing power of likely residents of Fairfield Station.

EDAW will employ primary and secondary data sources, including contacting local real estate brokers of currently leasing commercial and industrial space, home sales offices, and accessing available market data collected by market data vendors (i.e. Loopnet, ABAG Projections, Reis, RealQuest home sales, Claritas Inc., IMplan Economic Modeling Software, and Hanley Wood Market Intelligence).

## Subtask 3.1.3 Regional Economic Trends

While Fairfield's industrial and commercial real estate market conditions are tied to local employment and business decisions, they are also connected to regional economic growth and overall industrial real estate trends in both Sacramento and the San Francisco Bay Area. As such, it is important to evaluate employment growth and industrial demand in the two employment regions to understand potential regional capture of growing industry sectors, especially those suited for transit and proximity to rail. EDAW will research existing and projected regional employment growth by industry sector and identify growth industries for the Sacramento Metropolitan and Bay Area Region. In addition, EDAW will survey property representatives of available industrial and commercial space to identify commercial and industrial spaces most in demand in eastern Solano County and those users suited for Fairfield Station. EDAW will contact local economic development officials that best position Fairfield Station within the broader citywide strategy. Of specific interest will be the opportunity to capture bio-technology industry demand due to its proximity to both Vacaville and Emeryville along the Capitol Corridor. As part of the analysis, EDAW plans to meet with Fairfield Economic Development professionals to understand existing employers and their overall recruitment strategies for the City. Ultimately, the regional economic analysis will inform the potential regional capture Fairfield Station can achieve, if any, and how the space can be configured to maximize regional capture.

## Subtask 3.1.3a: Industry Sector Analysis and Tenanting Strategy

EDAW will also perform a detailed analysis of viable users for rail logistics industrial users and likely tenants for the industrial space planned at Fairfield Station, EDAW can perform a more in-depth economic analysis of industry sectors in Fairfield and the surrounding economic region, including reviewing recently updated economic census data, ES-202 employment data using GIS analysis tool, and a larger industry trend analysis of basic industry sectors. From that economic data, EDAW would develop a shift-share industry analysis to determine growing industries within Fairfield which may be appropriate for Fairfield Station and evaluate site location factors that would allow the site to draw employers from a broader region. EDAW would meet with contact surrounding industrial users that already utilize the rail corridor for their operations and what, if any, expansion plans they may have. From these interviews, EDAW will determine location and facilities criteria these prospective tenants would have to help drive the land use program and layout of industrial properties.

EDAW would draft a report of our findings and methodology describing prevailing economic trends and "basic" industries (called basic because they make up the base economy, as well as provide recommendations on industry sectors suited for Fairfield Station. The result would be an estimate of supportable demand for employment generating uses, excluding retail and local-serving medical which would be evaluated under the original market analysis scope, and the type of clients and business most likely to be attracted to space at Fairfield Station. The basis of this report could be used for marketing and investment purposes in attracting industrial tenants to Fairfield Station.

## Subtask 3.1.4 Sustainable Community Market Analysis

In recognition of Fairfield Station's unique vision of sustainability, the market analysis will evaluate potential price and absorption premiums associated with green homes and transit-oriented communities. As part of this analysis, EDAW's economic group will research comparable communities in the greater Northern California area researching sustainable product versus surrounding competition of similar size and amenities. In other words, the analysis will evaluate actual sales of otherwise comparable conventional homes to homes with green building elements. Where it can be identified, the market analysis will determine which specific green building elements show the highest return on investment. In addition, EDAW will build on its prior research on price and absorption premiums associated with sustainable community development, including commercial and industrial space developed during the SSIM economic analysis process and through its research on green building standards.

### Subtask 3.1.5 Draft Market Analysis and Development Program Recommendations

Based on the information analyzed under Tasks 1 through 4, EDAW will draft a market analysis Power Point™ report summarizing its findings. The report will provide recommendations on:

- Residential product mix with general density categories and acreages
- Residential pricing, target markets, and sustainable elements that will increase absorption and land values at Fairfield Station
- Retail program identifying neighborhood and community center demand, and the timing of the retail based on residential absorption.
- Business park program that gives a recommended mix of office and industrial flex space, and potential users suited for the area. The analysis would estimates of industrial and office absorption.
- Land use synergies that will increase absorption and facilitate employment generation

The report will also identify inducers that can facilitate development at Fairfield Station, be it site amenities, direct improvements to the train station, marketing to employees that already access the Capital Corridor, or other effort that would speed development at Fairfield Station. EDAW will provide all supporting background tables, a summary of its methodology, a summary of interviews, and a list of all secondary data sources. EDAW's economics staff will be available to present their findings per the client's request.

Subtask 3.1.5.a: LAFCO Market Analysis

In addition to the power point presentation, EDAW will draft a market analysis to specifically address the LAFCo market analysis standards. Specifically, the market analysis will describe the competitive supply of residential, commercial, and industrial land within the City compared to the 10—year projected growth in these general land use categories. EDAW will draft the market study for City review. Upon receipt of comments and making revisions, EDAW will draft a final market study for official LAFCo review. It is anticipated the EDAW will contact LAFCo staff prior to submittal to confirm the components of the market study as well as provide appropriate context of Fairfield Station. It is also anticipated that the LAFCo required market study will come towards the end of the planning and urban design process so as not to trigger multiple updates if submitted too early.

### Subtask 3.1.6 Coordinate Market Analysis with Land Planning Team and Attend Internal Workshops

EDAW's economics team will be available for internal workshops to give input on the land planning alternatives based on the market analysis findings. This will include recommendations on site amenities, allocation for commercial lands, lot premiums, and housing product mix. EDAW's

economics team will also lend its expertise on development economics to align the project's sustainability and planning goals with economic goals.

### TASK 3.2 FINANCING PLAN AND FISCAL ANALYSIS

EDAW's Sustainable Economics team will perform a public financing strategy for the proposed infrastructure improvements for up to three development alternatives envisioned at Fairfield. The strategy will evaluate City of Fairfield's existing development fee program already in place and the projected infrastructure costs provided by the transportation planner and/or the civil engineer. This evaluation will provide an estimate of the identified capital facility gaps that will need to be supported by the project.

In additional to public facility impact analysis, the fiscal analysis will project public service provision to Fairfield and determine the extent to which the community's projected General Fund revenues will offset service provision. The General Fund represents the City's discretionary funding source use to pay for general city services, including police, fire, public works, planning, parks, general government, and other city services that do not have its own finance mechanism for specific public purposes. The fiscal analysis of general fund revenues and costs will first identify fiscal drains to the City's general fund as a residential development project only, not including the potential absorption of industrial space. Where a financing deficit is identified, the financing plan will recommend community assessment district options and bond financing mechanisms which can offset in identified financing gaps. Thus, the analysis will ensure a net fiscal gain to the City's General Fund at project build out.

#### Subtask 3.2.1 Baseline Assessment of City Costs and Revenues

The baseline assessment evaluates existing fiscal conditions in City of Fairfield and determines existing public service standards that will drive public service provision at Fairfield Station. This baseline assessment will review unit costs of City service provision (i.e. annual maintenance costs per acre of park land, average costs per enforcement officer, average capital and maintenance costs of one mile of two-way roadway etc.). In addition, EDAW Sustainable Economics will obtain a copy of the City of Fairfield Budget and analyze the structure of the City's General Fund. EDAW will preliminarily identify those departmental expenditures and general fund revenue sources that are likely to be affected by development at the project site. As part of the background review, EDAW will meet with City staff to confirm assumptions, cost multipliers, and service standards to develop a model that reflects the specific fiscal conditions of Fairfield.[1] It is anticipated EDAW will have multiple meetings with the City Manager and Finance staff to confirm the underlying assumptions and develop a mutually agreed upon fiscal structure that reflects the City's fiscal expectations of Fairfield Station. These inputs will feed the fiscal model to provide an estimate of the ongoing City and special district costs.

EDAW's Sustainable Economics team will use the development program to estimate the service population as part of assessing future City revenues generated from property tax, sales tax, transient occupancy tax, in-lieu of vehicle license fees, franchise tax, and an assortment of other General Fund revenues directed to the City. Also, the development program will inform future revenue projections as the community absorbs over time. The projected absorption derived from the market analysis will be accessed to calculate when infrastructure will be constructed and the extent to which new development can finance infrastructure.

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[1] EDAW's Sustainable Economics Team has performed numerous fiscal analyses using a similar methodology to conform standard fiscal impact analysis practices to the local jurisdiction. Most recently, EDAW's Sustainable Economics team performed a fiscal analysis for the Walnut Creek Transit Village.

### Subtask 3.2.2 Define Development Program for Alternatives and Integrate Infrastructure Costs

Based on project descriptions and follow-up consultations with the project manager, EDAW will define development programs for each alternative, to use in projecting future public service costs and revenues associated with those alternatives. The development program will include the number of housing units by type (e.g., rental apartments, single-family attached for sale, single-family detached for sale); the types and quantities (square feet) of non-residential development; and quantities of open space, developed park land, other public facilities, and roadways to be publicly-maintained. Based on the definition of the EIR alternatives, this will include identifying the component of each alternative that would entail affordable housing units. This task will also include coordination with EDAW staff to ensure that the fiscal impact analysis uses assumptions regarding population and employment generation that are consistent with those assumptions used elsewhere in the EIR.

In addition, EDAW's Sustainable Economics Team will work with the transportation planner and/or civic engineer to determine infrastructure costs for the proposed alternatives. It is expected that the infrastructure cost estimates will be order-of-magnitude to assist in determining the financing gap between the City 's development fee program and the infrastructure program required for Fairfield.

### Subtask 3.2.3 Conduct Interviews with Representatives of Affected City Departments

Based on the development program and infrastructure costs, EDAW's Sustainable Economics Team will meet with the City of Fairfield's Finance Department to review the preliminary list of affected City departments and revenue sources to verify the list and make any changes that are deemed appropriate. We will discuss with the Finance Director the various methods available to project increases in revenues anticipated from new development and identify those methods that would be most compatible with the City 's own established methods for forecasting revenues from ongoing development as initially discussed in task 3.2.1. EDAW will also inquire as to whether the City has developed any of its own methodologies to project increases in Departmental costs, to determine whether there are methodologies that should be adapted to this study.[2]

After interviewing the Director, EDAW will conduct interviews with representatives of other affected City service departments to ascertain their views as to how the increased development at the project site would affect demand for services and how these increased service demands might affect ongoing operations and maintenance costs. EDAW will provide City representatives with summary descriptions of each of the three alternatives and will then interview the representatives regarding whether the anticipated service demands would be satisfied by existing excess service capacities, whether they would lead to incremental service cost increases that could be quantified through an average cost projecting technique, or whether there are specific itemized marginal cost increases that could be identified and differentiated between the alternatives.

EDAW will meet with the Public Works Department to understand their capital costs and determine existing infrastructure financing mechanisms used in previous developments. This will include opportunities to form a Mello-Roos district, a special assessment district, a landscaping and lighting district, or other special municipal bond financing programs to pay for infrastructure improvements. This will provide an initial assessment of the financing mechanisms and underlying tax assessment common with the City and local property owners.

[2] EDAW Sustainable Economics Team has developed fiscal models internally but it is preferred to develop fiscal standard to present information under a common fiscal language.

### Subtask 3.2.4 Develop Fiscal Impact Model

Based on information collected in prior tasks, EDAW's Sustainable Economics Team will develop an electronic spreadsheet model to project the fiscal impacts of each of the three primary EIR alternatives. The model will consist of a series of electronically linked spreadsheet pages that will document the development program, the cost and revenue projection methodologies and assumptions, and the anticipated net fiscal balance for each alternative.

### Subtask 3.2.5 Infrastructure Financing Analysis of the Preferred Alternative

Using the information gathered from Tasks 3.2.1 to 3.2.2, EDAW's Sustainable Economics Team will draft an infrastructure financing model that outlays infrastructure improvements, land absorption, development fees paid to the City, and capital costs paid by the developer to finance infrastructure improvements not covered by the fee program for the preferred alternative. Once EDAW's Sustainable Economics Team has determined the developer's infrastructure capital burden, we will recommend available infrastructure financing mechanisms that combine additional developer contributions with potential district financing mechanisms to support the upfront capital costs to support infrastructure investments necessary to support the project. The financing plan will include an order-of-magnitude estimate of the special assessment and local district fees that would be levied on parcels within Fairfield under the preferred alternative. The recommended special assessments and district charges will be balanced with the unit marketability recognizing a large tax burden placed on the end user can slow absorption, lower land prices, and could result in property tax payer appeals after project completion.

### Subtask 3.2.6 Prepare Draft Fiscal Impact Analysis Report and Infrastructure Financing Plan

EDAW's Sustainable Economics Team will prepare an Administrative Draft Fiscal Impact Report and Financing Plan that will document the background data and research, assumptions, and findings from the prior five tasks. This report will include a printout of the fiscal impact model and financing plan development worksheets for the three alternatives, describing in more detail the fiscal impacts of the preferred alternative. We will submit the Administrative Draft Report for review and comment. Upon receipt of comments on the Administrative Draft, EDAW's Sustainable Economics Team will revise the report as deemed appropriate and submit a Draft Report for public distribution in coordination with circulation of the DEIR.

### Subtask 3.2.7 Attend Public Meetings/EIR Hearings

EDAW staff will be available to attend public meetings and hearings in conjunction with the project. The budget for this task assumes that EDAW staff will attend up to two public meetings. For budget purposes, each meeting is assumed to be 3 hours in length with two hours of travel. **Attendance at any additional meetings will be billed on a time-and-materials basis, at EDAW's standard hourly billing rates**.

### Subtask 3.2.8 Respond to Comments

In addition, the City may require EDAW's assistance in responding to fiscal-related comments received from the public on the DEIR or on the Draft Fiscal Impact Analysis Report itself. EDAW staff will be available to assist responding to comments related to the fiscal impact analysis. EDAW has allocated budget for up to two rounds of comments.

## TASK 4: TECHNICAL & ENVIRONMENTAL STUDIES AND REPORTS

**Overview:**

The EDAW team will prepare and coordinate the preparation of several technical environmental

studies, as described below, that will be used to prepare the EIR (see Task 5). Several of these studies will be used by the Master Plan team prior to EIR preparation in order to gain a clear understanding of potential constraints of the site and potential impacts of development. This will enable the plan to achieve a high degree of self-mitigation. (The EIR process is described in Task 5.)

EDAW and its sub-consultant team will gather and analyze data in the following topics:

- **Engineering systems:** As a sub-consultant to EDAW Carlson, Barbee & Gibson (CBG) will address existing water, wastewater, and storm drainage systems in the planning area. In particular, areas of potential flooding will be mapped.
- **Soils and geology:** Constraints pertaining to soils and geologic conditions will be identified.
- **Biological constraints:** We will identify habitat types that should be considered in project planning, with a focus on potentially sensitive resources such as wetlands and habitat for special-status species.
- **Cultural resources:** Potentially important historic and prehistoric resources will be identified, to the degree evident based on field surveys and record checks.
- **Agricultural resources:** Important farmland, as defined by CEQA, will be mapped on site and on surrounding properties. We will also draw upon the strategic farmlands efforts led by the American Farmland Trust and the UC Davis Information Center for the Environment (ICE) to develop criteria for important farmland to supplement the conventional CEQA definition.
- **Noise sources:** Sources of existing mobile and stationary noise will be identified.
- **Visual resources:** Areas or locations of particular visual importance will be identified.
- **Public services:** Potential impact on service providers will be assessed. Water supply will be identified in a Water Supply Assessment prepared by the City.
- **Hazards and hazardous materials:** An overview of potential health hazards will be noted. Work includes Phase 1 ESA and Phase 2 ESA for specific areas of the site. (Costs for hazardous material investigation to be the responsibility of the landowner or other revenue source, possibly the remaining balance in the prior train station specific plan account)
- **Transportation:** As a sub-consultant to EDAW, Fehr & Peers will assess the locations and capacities of existing and proposed roadways and transit systems.
- **Land use and planning:** The potential for conflicts with existing plans will be assessed.
- **Air quality:** Factors that affect the generation of vehicle traffic and exhaust emissions will be noted.
- **Greenhouse gas emissions and global climate change:** This assessment will address impacts of the potential cumulative impacts proposed project on this topic, as well as the effect global warming may have upon the proposed project.

**Population, employment, and housing:** The effect the proposed plan would have on existing housing and job-generating uses will be assessed, as a result of the public scoping process.

To the extent possible, the information described above will be recorded on Geographic information systems (GIS) files so that a composite GIS base map can be created. EDAW will provide narrative for each identified resource. Together, these will be a critical tool for use in identifying and testing alternative land use concepts in an effort to reduce environmental

impacts and promote sustainability. Other issues can also be considered at this stage, but we have found that the issues listed above form a solid foundation for preparation of a conceptual land use plan. These, too, will be the primary topics addressed in the EIR.

Following are descriptions of several key areas of analysis for which technical reports will be prepared and ultimately used for preparation of the EIR:

## TASK 4.1 ENGINEERING SYSTEMS – CARLSON BARBEE AND GIBSON (CBG)

The purpose of this scope of work is to provide initial civil engineering consulting services to better define the projects infrastructure requirements, conducted by Carlson, Barbee & Gibson (CBG), EDAW's civil engineering consultant. The following scope highlights CBG's approach.

CBG will provide preliminary engineering services for grading, sewer collection and treatment, reclaimed water production and distribution, water supply, treatment, storage, pumping and distribution, storm drainage and hydrology.

### Subtask 4.1.1 Project Startup/Document Review

CBG will gather and review pertinent City of Fairfield and other jurisdictional agency codes and policies relating to civil infrastructure for:

- Sanitary sewer
- Storm drainage and flood control
- Water supply and distribution
- Roadways, circulation, and access
- Grading

CBG will also review the base/constraints mapping provided by the City related to tree cover, geotechnical investigation, adequacy of information, overall and specific content as they relate to topography, boundary, sanitary sewer, storm drainage and flood control, grading, water supply and roadway access and circulation.

CBG will attend one (1) initial project kickoff meeting and will attend two (2) infrastructure meetings with City of Fairfield Engineering staff.

The intended product is a working knowledge and understanding of the codes and policies that will govern the related infrastructure systems, and an understanding of the existing body of project information sufficient to allow synthesis of real opportunities and constraints on infrastructure systems and allow CBG to summarize and present those constraints and opportunities to the project team.

### Subtask 4.1.2 Record Boundary and Topographic Mapping

CBG will review boundary information provided by the City (received in electronic format, GIS or CADD) for the areas proposed for development for completeness and adequacy in defining project opportunities and constraints. CBG will also review topographic and aerial mapping provided by the City (received in electronic format, GIS or CADD) for completeness and adequacy. CBG to be provided five foot (5') contour data by the City for use by the consultant team in preparing the planning alternatives and the specific plan.

- CBG will review preliminary title reports along with deed and easement exception documents provided by the City and provided existing survey record information.

- CBG will review the extent, level of detail, and continuity of the aerial mapping and topography provided by City

.
The intended product is a detailed ownership and property line map for the Plan area. The ownership and property line map would be based upon information provided by the City and significant easements impacting the development areas would be located.

**Optional Subtask 4.1.2a Aerial Topography/Photography**
CBG to prepare 1"=100' scale, two-foot-contour-interval aerial topography of the Plan area. CBG will prepare one (1) color, geo-rectified aerial photograph of the Plan area.
(see optional task list at end of budget summary)

**Subtask 4.1.3 GIS Coordination, and Engineering Base Map**
A comprehensive and coordinated set of base physical data for the project will greatly assist the master planning team in envisioning, defining, and delivering on the City's goals of truly sustainable community infrastructure, making sure that all the pieces fit together. CBG will develop and maintain Geographic Information System (GIS) Geo data base(s) and Data Dictionary for the project. CBG will provide overall coordination and management of the GIS spatial data base for the project team.

The intent of this task is that CBG will receive GIS compatible data generated by other team members and incorporate it into a master GIS Geo data base. CBG will establish protocols, assure information sharing, and provide GIS data analysis and research. CBG will perform geographic analysis; prepare geographic exhibits for use by the project team as requested. It is anticipated that information from EDAW's master planning team, environmental team, the geotechnical consultant, the traffic consultant and others will be integrated into the geo database and made available to all consultant team members who may need access to such data. CBG will update the project GIS data base as needed.

CBG will support the generation of base information on which others of the planning team will utilize to generate their plans and data, and facilitate quick and efficient calculation of geophysical and spatial data resulting from the planning effort, all toward generation of supporting exhibits that will provide the City and the public with the information and knowledge necessary to make informed decisions.

**Subtask 4.1.4 Opportunities and Constraints Analysis**
Delivering a sustainable community plan and supporting infrastructure requires that the master planning team "listen to the land". Careful and thorough analysis of existing conditions during the initial stages of concept planning will provide the planning team the requisite knowledge necessary to design a plan that minimizes or avoids impacts to the maximum extent feasible, while taking advantage of opportunities to create a vibrant community, in tune with the surroundings. Opportunities and constraints are multi-faceted and broad ranging. To make sense of the connectedness of individual natural and constructed systems, we make use of a GIS geo-data-base to pull it all together. Site topography, tree cover, drainage patterns, soils and geologic stability, roadway access, availability of supporting utilities, water supply, fire safety, wastewater systems opportunities, all must be analyzed together, to assure that all the pieces fit.

CBG will analyze the physical attributes of the project location, including available topographic surveys, drainage patterns, tree cover, natural communities information provided by the environmental team, the existing roadway network, soils and geologic information from the geotechnical consultant, and rely on our own internal expertise to assess the ability to provide

effective water supply, treatment, and distribution, and to provide for community-scaled waste water reclamation, conveyance, and disposal.

**Subtask 4.1.5 Preliminary Land Use Analysis/Land Use Plans**

CBG will participate in consultation sessions with EDAW and other members of the project team to provide information that will describe material impacts and constraints to developable land area. Major issues will be grading analysis, drainage constraints, sanitary sewer service, waste water treatment, and water supply. Work for this task will include:

- Coordination during development of the land use plans, and review of those plans, identifying modifications that may result in more efficient layouts relating to infrastructure and grading.
- Refining the circulation and access plans for the land use plan. This includes coordinating with the traffic consultant to estimate roadway capacity, and provide initial guidance for on-site backbone roadway and site access requirements, including secondary access and non-vehicular circulation.
- Providing consultation relating to the open space corridors, school, parks and potential detention basins, specifically relating to storm drainage, flood control, and storm water quality.
- Preliminary phasing considerations: Phasing of infrastructure can have a significant impact on development costs. Project phasing must react to the market absorption analysis. Assumptions for phasing will be considered when reviewing the land use plan.

**Subtask 4.1.6 Storm Drainage/Flood Control Existing Conditions Analysis**

Research, Data Gathering, and Establish Drainage Criteria

- Obtain and review the “effective” FEMA Flood Insurance Study (FIS), Flood Insurance Rate Maps (FIRM), available hydrologic and hydraulic models, and other relevant drainage studies for the project site and surrounding areas.
- Perform a field visit of the project site to visually check and document the channel, floodplain, and watershed conditions.
- Coordinate with the City and other reviewing agencies regarding the project requirements and submittals.
- Obtain and review drainage manuals of the surrounding agencies and other relevant agency documents and publications.
- Develop recommended general criteria to be used for drainage/flood control/storm water quality facility Master Planning. It is assumed that the criteria for drainage, flood control, and storm water quality facilities analysis and design will be based on methods and guidelines that are readily available through various government agency resources. If it is required to develop project-specific criteria, CBG will provide this additional service on a “time and expense” basis.
- Coordinate and meet with the City to obtain their concurrence on the recommended criteria.
- Prepare a technical memo to document the recommended/agreed upon general criteria. This memo will identify the methods chosen without detailing the methods and applications. It is not the intent of this memo to function as a complete design manual. However, this memo will be used to identify the design and analysis methods and to reference other existing manuals for detailed discussions.

<u>Existing Conditions Hydrologic Analysis of Development Areas</u>

A baseline of the existing hydrology and hydraulics of the development areas will need to be determined in order to assess drainage impacts on these areas. The existing conditions will vary within the proposed developable area as a result of topography and the amount of area that drains into these areas. CBG will specifically perform the following engineering tasks in identifying existing hydrologic conditions within the developable areas:

- Determine flow concentration points for the project and watershed area.
- Delineate sub-watersheds based on the flow concentration points.
- Obtain and analyze soils, vegetation, and ground cover information for the watershed.
- Compute rainfall distributions for the watersheds using NOAA Atlas
- Determine sub-basin and flow routing parameters.
- Develop hydrologic models and or approximate methods for smaller sheds and compute flow rates.
- Prepare text to document the hydrologic methods and results.
- Prepare existing conditions watershed map, soils and vegetation maps, rainfall distribution map, and various peak flow summary tables.

**Subtask 4.1.7 Preliminary Infrastructure Master Plans**
CBG will conceptually analyze the land plan alternatives and provide consultation on opportunities and constraints for general level-of-service demands placed upon potable water and wastewater systems, drainage, grading and access, defining conceptual backbone infrastructure input to the design team. CBG will provide sufficient information to the project team relating to the required infrastructure to guide the determination of general phasing scenarios.

Recognizing that water is a precious resource, CBG will develop an integrated water management strategy for water supply, wastewater disposal, and reuse at the project site. The initial step in development of this integrated strategy is an assessment of water supply and wastewater disposal requirements. We will consider both existing water conservation best management practices and anticipated future improvements. Both indoor and outdoor conservation measures will be discussed including cutting-edge technology to reduce indoor water demands, as well as rainwater harvesting and other measures to reduce outdoor demands. CBG will prepare a Water Supply Assessment, as required by AB610 and described in Section 15155 of the CEQA Guidelines. The City will provide technical review of the document prior to finalizing to confirm land use changes and net change to original General Plan Water Supply Assessment.

Upon City approval of the proposed water conservation measures, we will quantify water supply needs along with the associated wastewater disposal requirements and reuse opportunities. An initial water budget will be developed and serve as the criteria in subsequent analyses of water supply, wastewater treatment, disposal, and water reuse alternatives.

CBG will perform the following tasks for the water, wastewater, drainage, grading and access Master Plans:

Potable Water: Perform preliminary investigation of total potable supply required; analyze potential water quality; review water demand factors versus best practice demand factors for indoor and outdoor use to reduce total water demand and support project sustainability goals, ascertain nearest potential point of connection to existing transmission and/or potential production well field location. CBG will perform up to two water supply alternatives to be considered for the project. This effort will also include preliminary identification of on-site infrastructure for potable water storage and delivery.

- Wastewater/Reclaimed Water: Perform preliminary determination of total treatment capacity required; conceptual estimate of required reclaimed water winter storage volume and required disposal/irrigated area in acres; assess City sewage generation factors versus best practice generation factors (based on reduced indoor water use) to reduce total wastewater treatment volume and supporting project sustainability goals. CBG will review project constraints to identify potential treatment and storage sites. This effort will include preliminary identification of on-site infrastructures for wastewater collection, treatment, and reuse, as well as proactive participation to define potential beneficial reclaimed water uses. A maximum of two wastewater treatment alternatives will be considered for the project.

- Drainage/Flood Control/Storm Water Quality: CBG will review the local hydrologic regime and indentify drainage corridors which would be desirable to preserve for surface flows. CBG will coordinate with geotechnical consultant to determine feasibility of infiltration of increased runoff (pre- versus post-development flows) and consideration of opportunities for beneficial reuse.

  Based on the project development land plan to be provided by EDAW, CBG will revise the existing conditions hydrologic models and prepare proposed project development conditions hydrologic models for three storm events (2-yr, 10-yr and 100-yr). CBG will then perform the following tasks for the developable areas to facilitate the preparation of the Master Plan:

  - Revise the sub-basin delineations based on the site layout plan.
  - Revise the sub-basin and flow routing parameters to reflect the proposed developments.
  - Identify common infiltration areas and methods to reduce project run off, detention basins to mitigate peak flows and storm water quality methods to insure compliance with local and state requirements.
  - Compute proposed conditions flow rates at selected concentration points.
  - Prepare a proposed conditions watershed map and peak flow summary tables.
  - Identify and develop up to two alternatives for each developable area.
  - Prepare conceptual cost estimates for the two alternatives for comparison purposes.
  - Coordinate and assist the City in selecting the “preferred” Master Plan improvement layout.
  - Refine the selected alternative plan and approximately size the facilities.
  - Prepare conceptual design layout plans for the selected Master Plan improvements. Only plan view drawings will be prepared for the Master Plan without details.

  - Grading: Based on the Preferred Land Plan prepared by EDAW, CBG will prepare a conceptual Grading Plan to identify sub-areas within the designated developable areas that are suitable for development. CBG will work closely with the geotechnical consultant to review suitability of the soils and slopes within these sub-areas to ensure that construction can be performed. An analysis will be performed of opportunities to minimize grading to reduce environmental, aesthetic, construction cost impacts and to allow for the construction of the developable areas to better blend in with the surrounding topography.

  - Utilities: CBG will consult with the local provider of power and/or natural gas to identify nearest potential points of connection and recommendation for addition of specialty

utility consultant to the project team. If points of connection are not available for service for some of the outlying developable areas, a list of potential alternatives will be developed for review. **Should further evaluation of alternative power and gas be needed this work will be done on a time-and-materials basis as authorized by the City.**

CBG will also develop and include a list of major conceptual system components for each infrastructure category identified above along with notes clarifying the system assumptions and major entitlement milestones for each infrastructure system that can be used in the future for the basis of compiling a project schedule for infrastructure. This list will include physical footprint requirements for major infrastructure systems that will form additional land planning constraints or demands.

**Subtask 4.1.8 Sustainability Assistance**

CBG will review three (3) alternative scenarios prepared by others for sustainability (good, better, and best) for water systems, sanitary sewer, storm drainage, non-potable water, and power. CBG will analyze the feasibility of each of these scenarios and provide written technical recommendations. CBG will also prepare preliminary cost analysis for each alternative.

**Subtask 4.1.9 Street and Circulation Standards**

CBG will work with EDAW and the traffic consultant to identify the minimum required street cross sections to meet traffic demand and level of service objectives. The goal will be to identify design objectives for safety, efficiency, capacity, and maintenance, while integrating community objectives and values relating to compatibility, livability, and walk ability, sense of place, urban design, and cost. CBG will prepare a memo outlining the proposed revisions to the City's standard street cross sections that identifies the benefits of reducing street width (slows traffic, changes the character of the streetscape, makes it more pedestrian friendly, reduces the consumption of non renewable resources, reduces the amount of impervious surface for drainage, and air pollution associated with paving and future overlays, and reduces heat island effects).

**Subtask 4.1.10 Construction Cost Estimate**

CBG will provide a preliminary cost estimate for major infrastructure systems based on the preferred Land Use Plan to be furnished to CBG by EDAW. Work will include preparing cost estimates for the backbone infrastructure systems including:

- Major access roads and structures
- Major developable areas requiring significant grading
- Major storm drainage facilities
- Major community water facilities (water supply, water treatment, dam and reservoir, pumping, transmission, and storage)
- Reclaimed water (major transmission and storage)
- Major sewage conveyance and
- Sewer treatment
- Other as needed

The task will be initiated by preparing a list of quantities of anticipated construction work. The list will be reviewed with the Project Team and revised accordingly. The Consultant will research the cost of construction in the Project area, prepare a preliminary cost estimate for the listed quantities.

CBG will correlate these infrastructure costs to the existing Northeast Area Fee.

**Subtask 4.1.11 Planning Application Assistance**

CBG will prepare a narrative outlining the strategies and general components for each infrastructure system as required for the Specific Plan and EIR. This will include system descriptions, approximate demand sizing, and general quantification of system, i.e., size and location of facilities. This will also include a general system set of schematic exhibits (11x17) for on and off-site water facilities, reclaimed water, sewer treatment, sewer collection and conveyance, grading, and storm drainage. This level of detail will allow identification of major project components sufficient to define the public services needed for the project.

CBG will assist EDAW in the preparation of necessary Planning Application packets to include the following:

- Introduction – review and comment.
- Project Description and Setting – review and comment.
- Goals and Policies and Guidelines – review and comment, with specific emphasis on infrastructure. Provide Goals and Policies for Infrastructure Services (civil).
- Land Use/Development Plan – review and comment, prepare draft of section for site development and grading.
- Major Infrastructure– prepare draft for Services section and exhibits (developed under individual tasks) for water supply, water storage and distribution, reclaimed water, wastewater, storm drainage, grading, and review and comment on sections for fire, police, schools, parks, and landscaping.
- Circulation – review narrative draft (prepared by traffic consultant) and prepare an exhibit for project circulation, review typical street cross sections prepared by EDAW.
- Parks and Open Space – review and comment.
- Financing/Governance Plan – review and comment.

CBG will also assist EDAW if required with the development of Master Community Design Guidelines. CBG will provide design guidelines for specific infrastructure design criteria necessary to implement sustainable best practices for infrastructure in addition to traditional Architectural guidelines developed by EDAW. This effort will include identification of needed modifications to zoning parameters and development standards, and infrastructure design standards required to implement the sustainable vision of the Planned Development.

CBG will assist EDAW in the preparation of the EIR. CBG will provide technical analysis for potable water, sanitary sewer, non-potable water, storm drainage/water quality, and dry utilities (gas, cable, telephone, and electric). CBG will prepare a detailed report in EDAW format which will include introduction, background settings, technical analysis, and mitigation measures. EDAW will incorporate the CBG technical report into the preparation of the EIR.

CBG will also assist in providing responses to comments for technical information related to potable water, sanitary sewer, non-potable water, storm drainage/water quality, and dry utilities (gas, cable, telephone, and electric).

**Subtask 4.1.12 Additional Support Services**

CBG will provide additional services upon request of consultant team, as confirmed by City. CBG recognizes there will be other agreements related to development of the property that will require legal descriptions of the property, maps of the property, maps showing the location of specific facilities, along with maps, exhibits and legal descriptions for easements or areas off-site. It is also

recognized by City and consultant that the services required to achieve the City's goals for this type of entitlement project may vary significantly from the exact description of the services provided herein. CBG understands the need for the City to quickly redirect the efforts of the consultant team. The City may request additional services in addition to those anticipated in this scope. CBG will attempt to document such additional requested work (written or verbal) and react to City's requests with a minimal amount of required contract administrative overhead or delay. All additional services requests will be coordinated through EDAW.

The intent of this task is to provide a budget for these additional services and special requests. Each time additional services are requested, CBG will complete a Work Order Confirmation form including a brief description of the requested work and the estimated fee. CBG will prepare documents as requested by the City on a time-and-material basis, setting up a new task number for billing for each request. **This scope includes an allowance for budget purposes**

**Subtask 4.1.13 Project Coordination and Meetings**

CBG staff will attend meetings with the City and project team at the City of Fairfield on a three week cycle (assume 20 total meetings through month 13). CBG will also attend interim internal project team meetings via teleconference (assume 20 conference calls) to discuss issues, questions as they come up during the planning process. Key discipline-specific staff shall also attend two joint study sessions, two planning commission hearings, and two city council meetings.

CBG will coordinate with ENGEO, EDAW's geologic consultant, to obtain specific geological constraints and recommendations for grading, over excavation, slope stability analysis, required set backs from faults and mitigation for potential liquefaction.

## TASK 4.2 SOILS AND GEOLOGY – ENGEO

As a sub-consultant to EDAW, ENGEO will perform the following task.

The purpose of the geotechnical feasibility study is to obtain information for developing preliminary professional opinions regarding soil conditions that may affect development of the property. We propose the following scope based on our experience and discussions with the project team:

- Perform a site reconnaissance for visual evaluation of existing conditions
- Review in-house project data in the general site vicinity
- Review readily available aerial photographs
- Review pertinent geologic maps, seismic hazard maps and earthquake hazard zone maps; seismic information and geologic reports
- Review the site conditions for the following geologic hazards:
  - Liquefaction
  - Landslides
  - Flooding
  - Seismic induced settlements
  - Lateral ground movement
  - Volcanic eruption
  - Tsunami or seiche
- Prepare a reconnaissance level report that includes the following:
  - Site description
  - Site geology
  - Local seismicity
  - Discussion of potential geotechnical issues affecting the site

- Potential for the geologic hazards listed above
- Recommendations for a design level report

## TASK 4.3 HAZARDS AND HAZARDOUS MATERIALS - ENGEO

As a sub-consultant to EDAW, ENGEO will provide a Phase 1 ESA and Phase 2 ESA for specific portions of the site, as described below:

Phase 1 ESA

- A review of the existing environmental documents provided.
- A review of publicly available and practically reviewable standard local, state or tribal, and federal environmental record sources.
- A review of publicly available and practically reviewable standard historical sources, aerial photographs, Sanborn Fire Insurance Maps, and physical setting sources.
- A reconnaissance of the project site and observation of adjoining properties.
- Preparation of a report with our findings, opinions and conclusions.

**Subtask 4.3.1 Site Reconnaissance**
ENGEO will conduct a "windshield" reconnaissance of the property to visually and/or physically review site use and current conditions. The reconnaissance will be conducted to check for the storage, use, production or disposal of hazardous or potentially hazardous materials.

The reconnaissance allows ENGEO to inventory current land use and development within the limits of the project site and surrounding properties. Interior building inspections will not be conducted as part of this scope.

**Subtask 4.3.2 Records Research**
ENGEO will review a government records database report prepared by Environmental Data Resources (EDR) to evaluate hazardous materials information regarding the subject site and nearby properties. If appropriate, agency-specific file research may be necessary for information regarding the subject property and nearby sites.

Available historic sequences of aerial photographs, topographic maps and Sanborn Fire Insurance Maps will be reviewed for the past use of the property. Aerial photographs will be reviewed for the history of development on the parcel and in the site vicinity.

Phase 2 ESA (Phase 2 Costs to be paid for by other than Canon Station LLC if property is not owned by Canon Station LLC

A Phase 2 environmental site assessment can consist of field sampling of air, surface water, groundwater, soil gas, surface soil, or deeper soils to assess for contamination from suspected areas of concern. The first task will be to prepare a complete inventory of each facility within the project area to determine if current site operations may be a source of contamination. Based on this inventory and the results of the hazardous materials assessment, we will revise our scope and cost estimate for the field sampling.

Based on a general knowledge of the site, a cursory site reconnaissance, and review of readily available online environmental files, we have identified several potential areas of concern that will likely require field sampling including but not limited to:

Three junkyards/wrecking yards - Junkyards and wrecking yards are common sources of shallow soil impacts including heavy metals, petroleum hydrocarbons, polycyclic aromatics, and polychlorinated biphenyls for example.

Travis Unified School District - Located in the southern portion of the project area, this site contained a leaking underground storage tank that impaired groundwater.

Solano Concrete Company - This site also contained a leaking underground storage tank that also impaired groundwater. Concrete facilities may also be associated with asbestos contamination to surface soils.

Agricultural Land - Based on aerial photography it appears that part of the project area may have been used for agricultural usage which may have utilized pesticides, herbicides, and fertilizers that could contaminate shallow soil, surface water, and groundwater.

Automobile/Truck Dismantling and Repair Facilities - Several vehicle repair sites were observed in the project area, some equipped with below- and above-ground fuel storage tanks. These sites could be potential sources of petroleum or solvent contamination.

Travis Air Force Base - This 6,000+ acre Superfund site abuts the project area to the south and west. The base contains at least 18 sources of contamination including abandoned landfills, solvents spills, fuel spills, oil spillage areas, radioactive waste burial sites, and fire protection training areas. These areas may impact the subject project area. Additionally, Union Creek which drains through the project area has been heavily contaminated by Travis Air Force Base activities leading to major fish kills.

Based on this limited knowledge of current and historic site usage, we anticipate that the following field activities are likely:

- Sampling of shallow soils throughout the industrialized portions of the site through hand augering.
- Sampling of deep soil and groundwater throughout the site, but also focused on the former leaking underground storage tank sites and auto repair sites.
- Surface water and sediment sampling of Union Creek and other surface water bodies connected to this waterway.

No soil gas sampling is proposed at this time since there are no known sites with contamination of volatile organic compounds, but given the industrial nature of many of the onsite facilities, this may be proposed in the future. Based on the results of the field sampling, we may recommend additional sampling to further characterize and delineate discovered contamination. The findings of the field sampling will be summarized in a formal report.

## TASK 4.4 BIOLOGICAL RESOURCES - EDAW

In support of development of a biologically sustainable specific plan and subsequent environmental review under CEQA, EDAW biologists will complete the following tasks:

## TASK 4.4 BIOLOGICAL RESOURCES - EDAW

In support of development of a biologically sustainable specific plan and subsequent environmental review under CEQA, EDAW biologists will complete the following tasks:

### Subtask 4.4.1 Prepare Biological Resources Opportunities and Constraints Analysis

EDAW understands that Canon Station LLC owns a significant portion (approximately three quarters) of the project area and that Canon Station LLC has retained LSA Associated to conduct biological resources surveys of their property, develop a permitting and mitigation strategy, identify preservation/enhancement areas, develop a constraints analysis, identify HCP requirements and prepare a mitigation plan that meets HCP requirements. Specific studies to be conducted by LSA include:

- Wetland delineation
- Contra Costa goldfields and other rare plant surveys
- California Tiger Salamander and fairy shrimp surveys.

We assume that these biological resources studies will be conducted prior to preparation of the Specific Plan and EIR and that the results of the surveys and proposed mitigation strategy will be available to support the biological resources impact analysis. We also assume that the studies prepared by LSA will include a habitat map that will include sufficient detail to support an assessment of suitable habitat for other special-status species that may occur on those portions of the project site owned by Canon Station LLC, but are not targeted by the focused special-status species surveys proposed.

EDAW also understands that the remaining portion (approximately one quarter) of the project area is owned by the City and is not included in the surveys to be conducted by LSA. EDAW will be responsible to conduct reconnaissance level surveys of the site to assess the site's potential to support sensitive biological resources including wetlands and special-status species at a level of detail sufficient to inform the planning process and support the EIR analysis.

EDAW biologists will prepare a biological resources opportunities and constraints analysis for the entire planning area that incorporates the LSA studies. Preparation of the analysis will include a review of existing data, reports, studies, or plans that have been recently prepared for the study, including studies to be prepared by LSA. These existing sources of information will be reviewed for accuracy.. Other materials that will be reviewed include aerial photographs of the project site and available biological resources studies and environmental impact reports prepared for other recent projects in the vicinity of the planning area, including data prepared in support of the Solano County General Plan Update and Solano Multi Species Habitat Conservation Plan (MSHCP). An electronic search of the California Department of Fish and Game's (DFG's) California Natural Diversity Data Base and the California Native Plant Society's (CNPS') electronic inventory will be conducted to obtain information regarding sensitive biological resources know from or potentially occurring in the planning area.

Several special-status species including Contra Costa goldfields (Lasthenia conjugens), a plant species federally listed as endangered, are known to occur in the planning area, and the planning

area includes a proposed vernal pool preserve. Early coordination with the U.S. Fish and Wildlife Service regarding their intents for establishing a local preserve will be essential to understand the goals of the proposed preserve and concerns for the planning area. EDAW biologist will coordinate with USFWS regarding their plans for preserves in the specific plan area. Other sensitive biological resources know from the site or immediate vicinity include ephemeral, intermittent and perennial drainages, vernal pools and associated special-status species such as vernal pool invertebrates, California tiger salamander and special-status plants, raptors such as Swainson's hawk and burrowing owls, and others.

EDAW biologists familiar with the plants and wildlife of Solano County will conduct a two day-day reconnaissance-level survey of the City-owned portion of the planning area to assess existing biological resources. Special focus will be given to sensitive biological resources (e.g., special-status species, sensitive natural communities) identified in the planning area that could be affected by proposed land use scenarios. In addition, EDAW will conduct a one-day reconnaissance survey of the area to be covered by the LSA studies to peer review and verify the results of the technical studies, assess the site's potential to support other special-status species not targeted during the focused surveys, and to ensure consistent coverage of the entire project planning area for EIR analysis purposes

Following the compilation of baseline data and the reconnaissance level survey, EDAW biologists will prepare the biological resources opportunities and constraints analysis report for the property that will summarize results of the LSA and EDAW field studies. We assume that the report will be a stand-alone document that adequately describes existing biological resources in the planning area to inform the development of land use scenarios developed during the preparation of the Specific Plan and that the report will serve as the setting section for the biological resources chapter of the Program EIR. For those portions of the planning area owned by Canon Station LLC, the biological resources opportunities and constraints report will draw heavily from the LSA studies and proposed permitting strategy, while for the City-owned portion, it will draw from data collected by EDAW.

The biological resources opportunities and constraints report will contain the following sections:

- An introduction to the report's topic, contents and purpose;
- Regulatory context outlining relevant federal, state and local laws and regulations pertaining to biological resources in the planning area including a brief overview of the Solano MSHCP;
- Relevant policies from the Conservation and Open Space City of Fairfield General Plan;
- Existing conditions data, including information on the presence and distribution of common and sensitive biological resources in the planning area;
- Maps depicting known locations of special-status species and sensitive natural communities in the planning area;
- Discussion of biological resources opportunities and potential constraints in the planning area;
- Results of coordination with USFWS;
- Environmental conditions and the location of important natural resources affecting the suitability of certain locations for development versus conservation options;
- Integration of the natural environment/open space component of the plan with other aspects of sustainability and site sensitive planning to be addressed in the specific plan;
- Location of the planning area in the larger region and in light of other ongoing regional planning and conservation efforts;

- Implication of global climate change on the long term viability of special-status species and sensitive natural resources in the planning area;
- Proposed permitting strategy and mitigation plan prepared by LSA;
- References.

The biological resources opportunities and constraints analysis will be presented in a manner that is easily understood by lay people. A draft opportunities and constraints analysis will be submitted to the City for review and comment. Following the receipt of one set of unified comments, a final opportunities and constraints report will be prepared.

Subtask 4.4.2 Integrate Biological Resources Information with Specific Plan Development
Conservation of the natural resources known to occur in the Specific Plan area will be a focus of this task. EDAW biologists will work closely with the Specific Plan design and development team to inform the team about biological resources opportunities and constraints present on the project site. This will include incorporating data from the biological resources studies compiled by LSA and the reconnaissance-level studies to be conducted by EDAW for the City-owned portion of the planning area. The goal of this close cooperation will be to develop land use scenarios that limit adverse effects on biological resources present on site while achieving the specific plan goals to the greatest extent feasible. Another goal will be to incorporate the permitting strategy and mitigation plan to be developed by LSA into the planning process. Opportunities for resource enhancement and restoration will also be identified. This integrated approach is expected to results in a proposed specific plan scenario that is sustainable and protects local creeks and waterways, occurrences of special-status species and other sensitive natural communities. Potential migration and dispersal corridors, issues related to wetlands and floodplains, and the protection of open space and agricultural lands will be discussed. EDAW biologists will work closely with the other members of the planning team to formulate biological resources and sustainability goals and policies for inclusion into the Conservation and Open Space Elements of the Specific Plan. Issues and opportunities identified under Subtask 4.4.1 will guide the subject and focus of these policies. EDAW will also closely coordinate with LSA to ensure that the mitigation plan and permitting strategy developed by LSA for Canon Station LLC will be incorporated into the specific plan.

**Subtask 4.4.3 Prepare Biological Resources Section for the EIR**

The biological resources opportunities and constraints report prepared under Subtask 4.4.1 will serve as the setting section for the biological resources chapter of the program EIR. The environmental analysis section of the biological resources chapter will disclose and analyze all potentially significant direct, indirect and cumulative impacts on biological resources potentially resulting from implementation of the proposed Specific Plan, including the mitigation plan to be prepared by LSA. Acreages of impacts on wetlands, other sensitive natural communities, and habitats for special-status species will be quantified by overlaying the proposed land use plan scenarios with biological resources baseline maps prepared for the planning area. Feasible and practical mitigation measures that would minimize or eliminate potential adverse impacts on biological resources resulting from implementation of the proposed Specific Plan will be provided. Cumulative impacts on biological resources will also be discussed.

Notes/Assumptions
1) This scope of services does not include focused surveys for special-status species or formal wetland delineation according to U.S. Army Corps of Engineers standards for those portions of the

project area owned by the City. If it is determined during preparation of the biological resources opportunities and constraints report or during development of the Specific Plan that these studies are necessary to inform the planning process or complete the EIR analysis, EDAW biologists are qualified and prepared to perform these services under an amendment to this scope of work.
2) We understand that LSA Associates will prepare a wetland delineation and conduct focused special-status species surveys for Contra Costa Goldfields and other rare plants and for California tiger salamander and special-status vernal pool invertebrates for those portions of the planning area owned by Canon Station LLC and this data will be available to support the planning process and the EIR analysis.
3) We understand that it is the applicant's desire to seek coverage under the Solano Multi-species HCP and that Canon Station LLC has retained LSA to develop a permitting strategy and mitigation plan to comply with the HCP requirements for those portions of the planning area owned by Canon Station LLC.

**Subtask 4.4.2 Integrate Biological Resources Information with Specific Plan Development**
Conservation of the natural resources known to occur in the Specific Plan area will be a focus of this task. EDAW biologists will work closely with the Specific Plan design and development team to inform the team about biological resources opportunities and constraints present on the project site. The goal of this close cooperation will be to develop land use scenarios that limit adverse effects on biological resources present on site while achieving the specific plan goals to the greatest extent feasible. Opportunities for resource enhancement and restoration will also be identified. This integrated approach is expected to results in a proposed specific plan scenario that is sustainable and protects local creeks and waterways, occurrences of special status species and other sensitive natural communities. Potential migration and dispersal corridors, issues related to wetlands and floodplains, and the protection of open space and agricultural lands will be discussed. EDAW biologists will work closely with the other members of the planning team to formulate biological resources and sustainability goals and policies for inclusion into the Conservation and Open Space Elements of the Specific Plan. Issues and opportunities identified under Subtask 1 will guide the subject and focus of these policies.

**Subtask 4.4.3 Prepare Biological Resources Section for the EIR**
The biological resources opportunities and constraints report prepared under Subtask 1 will serve as the setting section for the biological resources chapter of the program EIR. The environmental analysis section of the biological resources chapter will disclose and analyze all potentially significant direct, indirect and cumulative impacts on biological resources potentially resulting from implementation of the proposed Specific Plan. Acreages of impacts on wetlands, other sensitive natural communities, and habitats for special-status species will be quantified by overlaying the proposed land use plan scenarios with biological resources baseline maps prepared for the planning area. Feasible and practical mitigation measures that would minimize or eliminate potential adverse impacts on biological resources resulting from implementation of the proposed Specific Plan will be provided. Cumulative impacts on biological resources will also be discussed.

**Notes/Assumptions**

1) This scope of services does not include focused surveys for special-status species or formal wetland delineation according to U.S. Army Corps of Engineers standards. If it is determined during preparation of the biological resources opportunities and constraints report or during development of the Specific Plan that these studies are necessary to inform the planning process or complete the EIR analysis, EDAW biologists are qualified and prepared to perform these services under an amendment to this scope of work.

2) We understand that LSA Associates will prepare a wetlands delineation for the lands east of Peabody Road.
3) We will comply with the Biological Opinion for the HCP and provide mitigation measures that conform to the draft HCP.

## TASK 4.5 CULTURAL RESOURCES - EDAW

EDAW understands that the project requires an assessment of cultural resources situated within the project area. The region is known to contain a wide variety of prehistoric and historic cultural resources ranging from early Native American habitation sites to evidence for early settlement and agricultural activities. In order to determine if any potentially significant (per CEQA) cultural resources are present within the project area and whether or not they could be adversely impacted, EDAW proposes a phased research approach that includes documentary and field investigations as well as coordination with the Native American community.

### Subtask 4.5.1 Native American Coordination

EDAW maintains an ongoing program of project coordination with the Native American community. EDAW will initiate contact with the Native American Heritage Commission (NAHC) to request a search of the Sacred Lands File and a list of suitable Native American tribal representatives from the region. EDAW will contact each individual/group on the list with a letter and follow-up phone calls if necessary to solicit any information or concerns that they might have regarding the proposed project. Because a General Plan Amendment is required, EDAW will conduct a formal Native American consultation, as required by SB 18.

### Subtask 4.5.2 Pre-field Research

The initial cultural resources investigations will include a review of previous archaeological survey and excavation reports, archaeological site records and formal property listings on file at the California Historical Resources Information System. The collection of existing information on archaeological surveys, excavations and site records and mapped historical data for the project area may be supplemented with additional research. This research may include, but not necessarily be limited to contacting local historical organizations in an effort to determine if cultural resources not formally recorded are present within the project area or the immediate vicinity.

### Subtask 4.5.3 Field Inventory

An intensive archaeological inventory must be conducted utilizing pedestrian transects spaced no greater than 15 meters apart over sections of the project area that have not been recently developed. In areas determined to be less sensitive, such as steep hillsides or ravines, transects may be spaced wider or other suitable survey methods may be employed. Any newly identified archaeological sites, including linear features, encountered within the project area will be recorded in a manner consistent with guidance provided by the California Office of Historic Preservation. California Department of Parks and Recreation Series 523 forms will be prepared, along with appropriate supporting forms (e.g., Archaeological Site Record, Linear Feature record, Site Sketch Map, Location Map) as necessary. Based on information provided to EDAW, it does not appear that this inventory will require the input of an architectural historian. However, if standing potentially historic buildings and structures are noted within the project area, it may be necessary for an architectural historian to conduct research on such resources and provide significance assessments. Should this become necessary, an addendum to this scope and accompanying cost may be necessary.

### Subtask 4.5.4 Cultural Resources Inventory Report and EIR Section

EDAW will produce a stand-alone technical report that documents the methods and findings of the cultural resources inventory of the project area. This report will describe prefield research methods including repositories visited and data reviewed, field inventory procedures and results and a summary of cultural resources identified within the project areas. The summary of archaeological and historical resources will include an assessment of each resource against the eligibility criteria for listing on the California Register of Historical Resources (CRHR).

An assessment of potential project-related impacts to significant archaeological and historical resources will also be included in the technical report. The technical report will also include recommendations for the management or treatment of potentially significant archaeological and historical resources, as appropriate, with a focus on mitigation measures that may be needed to avoid or reduce potentially significant impacts. A summary of these impacts and the results of the Native American coordination, prefield research, and survey will be provided in the cultural resources EIR section. The EIR will also provide mitigation measures designed to reduce impacts to significant and potentially significant (per the CRHR) sites, features, artifacts, and places of cultural significance.

## TASK 4.6 AGRICULTURAL RESOURCES - EDAW

Portions of the project area may be in agricultural production. The agricultural resources section will describe existing agricultural resources on the project site and in the surrounding area, including a description of the types of farming activities and a description of onsite soils that are suitable for farming activities. Lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by California's Department of Conservation Farmland Mapping and Monitoring Program ("farmland" as defined by CEQA), along with areas currently under active cultivation, will be described and mapped in the environmental setting discussion. This analysis will also document which portions of the site are covered under the Williamson Act.

EDAW will analyze the elements of the proposed project that would result in the conversion of agricultural land to other uses. The agricultural analysis will also consider City policies regarding agricultural uses. Impacts to agricultural uses or designated farmlands resulting from project implementation will be identified and quantified. The potential for incompatibility between urban uses and agricultural land use (including ranchettes) within and on the perimeter of the plan area will be assessed. This will be particularly important, given the length of time it will take to fully implement the plan. Mitigation measures will be identified to minimize impacts where feasible, including consideration of phasing, buffers, conservation easements, right-to-farm disclosures, etc.

As previously noted, our analysis will draw upon the strategic farmlands efforts led by the American Farmland Trust and the UC Davis Information Center for the Environment (ICE) to develop criteria for important farmland to supplement the conventional CEQA definition.

## TASK 4.7 NOISE - EDAW

The EIR will include a description of the existing noise environment on and in the vicinity of the project site, based on existing environmental documentation and on-site reconnaissance data. Particular attention will be given to noise associated with flight operations at Travis AFB and the Union Pacific railroad tracks. If available from existing sources/documentation, noise contour

maps associated with nearby major noise sources that could potentially affect the project site will be incorporated into the EIR. As part of a site reconnaissance, our noise specialists will conduct a maximum of eight short-term (i.e., 15-minute) and two long-term (i.e., 24-hour) noise measurements at various locations on and in the vicinity of the proposed project to characterize the existing noise environment.

Nearby existing, noise-sensitive receptors and noise sources will be identified and discussed based on field observations and published reports (FAR Part 77 land use compatibility reports, etc). Relevant background information, including noise fundamentals, descriptors, and applicable federal, state, and local regulatory framework, will also be presented in the EIR.

Short-term and long-term noise impacts will be assessed for the proposed project. Short-term and long-term impacts will be analyzed, as described below.

To assess potential temporary, short-term (i.e., construction) noise impacts, sensitive receptors and their relative exposure (considering topographic barriers and distance) will be identified. Noise levels of specific construction equipment will be determined and resultant noise levels at those receptors (at given distances from the source) will be calculated. Predicted noise levels will be compared with applicable state and local standards.

The EIR will include an assessment of potential long-term (i.e., operational) mobile- and stationary-source noise impacts. With respect to traffic noise, the EIR will include traffic noise modeling data based on average daily traffic (ADT) volumes to be provided from the traffic analysis to be prepared for this project by Fehr & Peers. A Federal Highway Administration-approved traffic noise prediction model will be used to determine roadway traffic noise levels (in day-night noise level/community noise equivalent level [Ldn/CNEL]) for existing and cumulative, no project and plus project, scenarios for up to 10 affected roadway segments in the primary development area. The EIR will determine if modeled increases to roadway noise levels from project implementation would adversely affect nearby existing noise-sensitive land uses. Modeled traffic noise levels and distances to noise contours for the modeled scenarios will be summarized in the EIR.

The assessment of long-term noise impacts will include an analysis of stationary source noise impacts associated with the proposed project, and potential noise impacts to the site associated with nearby noise sources. This analysis will include an evaluation of the potential for existing stationary noise sources to affect proposed on-site land uses and of the potential for proposed on-site, noise-generating land uses to affect both on-site and off-site receptors. Analysis of nearby noise sources and potential impacts to the project site will be based on existing environmental documentation and data obtained from the noise monitoring survey. Modeling of aircraft noise associated with Travis AFB is not included in this scope because it is assumed that such analysis will have already been completed. The significance of long-term noise impacts will be determined based on applicable State and local standards.

The analysis will also address the exposure of sensitive receptors to excessive ground borne vibration levels during short-term construction and long-term operations. Mitigation measures will be developed for significant and potentially significant noise impacts.

### TASK 4.8 VISUAL RESOURCES - EDAW

Portions of the planning area are developed with a variety of light industrial uses and other portions are undeveloped. EDAW will evaluate the potential for the urbanization of the project

site to gradually eliminate views of expanses of open space that are currently seen from adjacent roadways. A reconnaissance-level site visit will be conducted to evaluate the visual character of the project site and surrounding areas and to take photographs to be included in the EIR. Visual photo-simulations are not proposed. If the City determines that photo-simulations should be prepared, EDAW can produce them, subject to a scope amendment. The effect of the change in the visual character of the project study area from rural to urban uses will be evaluated and any scenic resources (riparian woodland, oak woodland, drainages, trees) that could potentially be damaged will be identified.

The character of the urban design of the proposed project will be evaluated with respect to its ability to enhance the visual quality of the city and the visual experience of those visiting or residing in the immediate area. If available, architectural renderings and landscaping plans will be shown as exhibits in the EIR. These renderings would provide design elements that would aid in the analysis.

EDAW will evaluate the potential for lighted commercial and recreational uses within the specific plan to result in light and glare effects both within and adjacent (future) to the project study area. The potential for project lighting to increase ambient light levels causing diminished or obscured views of nighttime skies will also be analyzed. If available from the project applicant, lighting plans will be analyzed to reduce light and glare effects. If such plans are not available, EDAW will provide performance standards as mitigation to be incorporated into the EIR and specific plan.

### TASK 4.9 PUBLIC SERVICES - EDAW

The public services section will address law enforcement, fire protection, schools, solid waste, and parks and recreation. In addition to reviewing available municipal services documents, EDAW will contact each of the affected public service providers to obtain relevant baseline and regulatory information, and solicit input on potential impacts.

Project-related demand for facilities and services will be estimated and compared against existing capacity and proposed future capacity associated with the plan area (e.g., potential construction of on-site parks, fire stations, schools, etc.). Service demand will be determined using population projections and land use information contained in the draft specific plan. Impacts will be based on whether any new facilities would be needed and if construction of such facilities could generate significant impacts.

As an augmentation to the infrastructure tasks that will be completed by Carlson, Barbee & Gibson, the City of Fairfield will prepare a water supply assessment in fulfillment of SB 610, now included as Section 15155 of the CEQA Guidelines.

### TASK 4.10 LAND USE AND PLANNING - EDAW

EDAW will assess the consistency of the proposed project with adopted plans and policies aimed at reducing or eliminating environmental impacts, including consistency with the portions of the Fairfield General Plan and Zoning Ordinance. Because this area is predominately unincorporated lands, it may be appropriate to consider environmental goals included in the Solano County General Plan land use and zoning designations, as well as City land use and zoning designations.

Existing land uses in the immediate vicinity of the project will be described based on site visits,

aerial photographs, and other information. This section will also evaluate conversion from a mix of low density land uses, including rural residential and agriculture, to urban uses. An exhibit showing existing land uses will be presented in the EIR. An assessment consisting of each issue area presented in the EIR (i.e., transportation, air quality, noise, etc.) with adopted plans and policies will be conducted as part of each issue area.

### TASK 4.11 AIR QUALITY - EDAW

The project site is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) and immediately south of the Yolo-Solano Air Quality Management District.

Regional and localized conditions in the vicinity of the project site will be described, along with meteorological conditions in the vicinity of the project site that could affect air pollutant dispersal or transport.. Data from nearby pollutant monitoring stations will be presented in tabular form to characterize the existing ambient air quality in the project area. Applicable air quality regulatory framework, standards, and significance thresholds will also be presented. Field monitoring and on-site measurements of meteorological conditions and pollutant emissions are not expected to be necessary and are not included in this scope of work.

The analysis of direct, indirect, and cumulative air quality impacts will be based on the BAAQMD air quality criteria, including the BAAQMD's CEQA Guidelines, and will consider the potential health-related impacts that could result from the proposed project. The air quality impact analysis will include a general discussion of potential short-term (i.e., construction) air pollutant emissions. Projected construction generated emissions will be based on construction data (e.g., assumed duration of construction, amount of land to be disturbed/graded, types of equipment to be used, number of construction employees) to be provided by the project applicant. It is assumed that pollutant dispersion modeling will not be necessary to evaluate emissions generated by construction activities. Total construction generated emissions of criteria pollutants will be compared with applicable BAAQMD significance thresholds for short-term emissions.

Long-term (i.e., operational) regional air pollutant emissions, including stationary and mobile source emissions, will be assessed for the proposed project and each alternative. Regional mobile-source emissions will be estimated based, in part, on trip generation data from the traffic analysis prepared for this EIR. The current version of the URBEMIS2007 (version 9.2.4) computer model and BAAQMD-recommended inputs to URBEMIS default values will be used to estimate regional emissions associated with the proposed project. Total regional operational emissions of criteria air pollutants will be compared with applicable BAAQMD significance thresholds for operational emissions

EDAW has assumed that a conservative screening-level analysis will be sufficient to assess local mobile-source carbon monoxide (CO) impacts at affected intersections in the project study area. It is assumed that CALINE 4 modeling will not be included as part of this scope of work. CO concentrations calculated as part of the screening-level analysis will be compared with State and federal 1- and 8-hour ambient air quality standards to determine significance

Sources of diesel emissions (e.g., loading docks at industrial/commercial facilities) proposed by the project will be evaluated for their potential to expose sensitive receptors to high levels of diesel-PM In addition, the potential exposure of sensitive land uses developed by the project (i.e., residences) to toxic air contaminants (TACs) from existing off-site sources, if present, will also be discussed. The evaluation of both diesel-PM and TACs will be qualitative and no dispersion modeling or Health Risk Asessment will be performed under this scope of work.

Finally, the EIR will provide a qualitative analysis of potential odor impacts. Mitigation measures will be proposed for significant air quality impacts.

### TASK 4.12 GREENHOUSE GAS EMISSIONS AND GLOBAL CLIMATE Change - EDAW

EDAW will conduct an analysis of greenhouse gas (GHG) emissions to respond to this new, emerging issue area, which is currently the focus of legal scrutiny. Our first task will be to work closely with the project team to fully integrate smart growth principles into the analysis, ensuring project design features that reduce vehicle miles traveled and reduce energy consumption are fully incorporated into the analysis. Mitigation will be quantified, to the degree possible, based on further integration of smart growth principles (mixing land uses and densities, providing for access to public transit, using other design elements), other energy efficiency conservation measures (providing for use of solar, micro-energy generation, water conservation, etc.), and other measures that can reduce GHG emissions.

As noted elsewhere in this scope of services, EDAW's Master Plan team will develop sustainability standards. Using these as a starting point, EDAW will work collaboratively to develop more rigorous evaluative standards. EDAW has developed an approach to the analysis of the effectiveness of various measures, and this can be used to inform the land planning approach. The focus will be on proven and cost-effective measures to reduce GHG emissions and their performance. Points can be assigned to various measures, based on their percent reduction in GHG potential. This will allow the specific plan to incorporate these considerations in design elements and guidelines for future development.

An additional challenge will be to develop a threshold of significance or a surrogate for a threshold. Our preferred approach is to evaluate the project against the goals stated in legislation such as Assembly Bill 32, which requires the State to reduce total GHG emission to 1990 levels despite 30 years of population and economic growth. This approach suggests the necessary reduction in GHG emissions per service unit (e.g., jobs and person) over time, to enable development in California to become more GHG-efficient.

As a dedicated chapter, the Greenhouse Gas Emissions and Global Climate Change chapter will be able to set an appropriate baseline and provide a sufficient environmental setting including the regulatory framework such as AB 1493, Executive Order S-3-05, AB 32, and SB 97 and SB 375. . The chapter will disclose and discuss the uncertainties involved with climate change. As noted above, the chapter will estimate the direct and indirect GHG emissions and will discuss mitigating factors such as "smart growth," vehicle trip reductions,, and electricity usage reductions, and water conservation.. Finally, the chapter will disclose and discuss the potential effects of global climate change on the proposed project that affect such areas as water supply (which will describe the uncertainty surrounding climate change affects), water quality, sea level rise,, and flood control. The analysis of the effects of global climate change on the project will focus on climate change mechanisms (e.g., increased temperature, altered precipitation patterns) that may result in reasonably foreseeable direct effects on physical conditions at the project site.

### TASK 4.13 POPULATION, EMPLOYMENT AND HOUSING - EDAW

The population, employment, and housing analysis will include a review of the City's housing goals and policies; potential changes in population, employment, and housing characteristics resulting from the project; and the potential for secondary environmental impacts from those

changes. The population analysis will compare the amount and type of growth anticipated under the project with estimates contained in the Fairfield General Plan, the County, the U.S. Census Bureau, and other adopted planning documents, including ABAG projections. The analysis can also include a brief discussion of regional housing allocation needs. EDAW assumes that regional jobs/housing ratios will not be addressed, unless the City desires to assess regional jobs/housing ratios. **For purposes of this scope of work, a regional jobs/housing balance is not included.**

CEQA Appendix G also includes criteria related to displacement of people and housing necessitating the need to construct replacement housing elsewhere. Evaluation of this issue will also be addressed.

### TASK 4.14 TRANSPORTATION – FEHR AND PEERS

Under contract to EDAW Fehr & Peers will complete the traffic and transit analysis. Fehr & Peers' approach to this work is to draw to the maximum extent possible from the previous work performed for the Fairfield Train Station Area Specific Plan, while expanding and updating the analysis to reflect:

- Potential changes in the Specific Plan area
- The expanded master planning area and Master Plan development effort
- The availability of the STA's new Solano-Napa Multi-Modal Travel Demand Model, and
- Improvements in methodologies to assess transportation characteristics of large mixed use development areas
- Potential measures to reduce vehicle trip generation and vehicle miles traveled and to reduce impacts and infrastructure needs through sustainability integrated land use and transportation strategies

Fehr & Peers has developed a validated methodology that assesses the trip generation by mode of mixed use developments, in particular those well-served by transit, and we will apply this methodology to the land use planning process for the expanded planning area to ensure that the multi-modal trip generation of the Master Plan and Specific Plan is accurately modeled. We will also perform analyses of transportation characteristics and indicators to support the sustainability analysis and ensure that the Master Plan and Specific Plan are as self-mitigating and sustainable as possible.

The following scope of work is structured to fit within EDAW's master scope tasks. The bulk of our technical work is described below, but our participation in team tasks, including support in the preparation of team deliverables, is covered in the other tasks listed below.

#### Subtask 4.14.1 Northeast Fairfield Station Area Master Planning Phase

**Kick-off Meeting**
Fehr & Peers will attend the kick-off meeting to provide the transportation planning background on the project and obtain updated project information and background materials.

**Site Visit**
Fehr & Peers will participate in the site visit.

**Policy and Planning Data Review**

Fehr & Peers will obtain policy and planning background materials from EDAW and the City, and develop outstanding data needs and questions based on our review.

**Opportunities and Constraints Analysis**
Fehr & Peers will provide a transportation opportunities and constraints evaluation for incorporation into the team's product.

**Conceptual Northeast Fairfield Station Area Master Plan Preparation**
Fehr & Peers will provide circulation system input to the team for use in the development of the Master Plan concept drawing.

**Circulation, Roadways and Open Space Conditions**
Fehr & Peers will provide the necessary transportation capacity and circulation system requirements to EDAW to support the preparation of the Master Plan.

### Subtask 4.14.2 Sustainability Program

**Core Theme Research and Modeling (Transportation Strategies)**
Fehr & Peers will work with the team to develop and analyze strategies to maximize the sustainability of Master Plan and Specific Plan's transportation systems.

### Subtask 4.14.3 Technical Environmental Reports

#### 4.14.3.1 Existing Conditions

In conjunction with the project start-up tasks, Fehr & Peers will discuss the available existing conditions data with City transportation planning and traffic engineering staff. We will obtain existing (2008) daily, AM and PM peak hour traffic count data from the City where available, and will supplement that data with new counts at intersections where 2008 data is not available (see list of study intersections below). We will describe the existing and planned transportation systems in the study area, including traffic operations, transit service and ridership, bikeways, and pedestrian facilities. Existing operations will be described using the City's desired LOS methodology. As part of this analysis, F&P will undertake the following steps:

- Conduct AM and PM peak period traffic counts at 38 intersections, identified by the City of Fairfield and project applicant and listed below, within the master planning area and in the greater traffic study area. The traffic counts will include vehicular traffic and pedestrian and bicycle volumes. The cost of obtaining the counts is being covered in a separate contract between the applicant and Fehr & Peers.

    1. Peabody Road/Cement Hill Road/Vanden Road
    2. Peabody Road/Markley Lane
    3. Peabody Road/Huntington Drive/Whitney Drive
    4. Peabody Road/Dobe Lane
    5. Peabody Road/Air Base Parkway
    6. Peabody Road/Alamo Drive
    7. Peabody Road/California Drive
    8. Peabody Road/Joseph Gerevas Drive
    9. Peabody Road/Water Works Lane
    10. Cement Hill Road/Noonan Lane
    11. Cement Hill Road/Walters Road
    12. Cement Hill Road/Manuel Campos Parkway

13. Leisure Town Road/Vanden Road
14. Leisure Town Road/Alamo Drive
15. Air Base Parkway/Walters Road
16. Air Base Parkway/Clay Bank Road
17. Air Base Parkway/Dover Ave
18. Air Base Parkway Westbound Ramps/North Texas Street
19. Air Base Parkway Eastbound Ramps/North Texas Street
20. Air Base Parkway/Heath Drive
21. Air Base Parkway/I-80 Eastbound Ramps
22. Air Base Parkway/Hilborn Avenue/I-80 Westbound On-ramp
23. Walters Road/East Tabor Avenue
24. Walters Road/Pintail Drive
25. Walters Road (Lawler Ranch Parkway)/SR 12
26. East Tabor/Claybank Road
27. East Tabor/Dover Avenue
28. East Tabor/North Texas Street
29. Cement Hill Road/Claybank Road
30. Cement Hill Road/Dover Avenue
31. Cement Hill Road/North Texas Street
32. North Texas Street/Dickson Hill Road
33. North Texas Street/I-80 Eeastbound Ramps
34. North Texas Street/I-80 Westbound Ramps
35. Hay Road/Lewis Road
36. McCrory Road/Meridian Road
37. Canon Road/North Gate Road
38. Canon Road/ Vanden Road

- Calculate the current levels of service (LOS) at the intersections, using the methodology approved by the City of Fairfield. The 2000 HCM operations method with the Synchro software is recommended.
- Calculate the current levels of service (LOS) at the intersections, using the methodology approved by the City of Fairfield. The 2000 HCM operations method with the Synchro software is recommended.
- Obtain and report the most recent traffic volumes available from Caltrans for I-80 between SR 12 East and Leisure Town Road interchange,
- Describe the pedestrian and bicycle facilities within the study area, and existing travel patterns and volumes.
- Describe the transit routes, headways, and existing ridership levels serving the study area.
- Summarize the regulatory setting for the Fairfield Station Area Master Plan area, including the General Plan Circulation Element goals and policies, the Solano County General Plan Circulation Element goals and policies, the Solano Countywide Transportation Plan, and other documents as appropriate.
- Summarize the planned transportation improvements in the study area, including roadway improvements (including the Jepson Parkway, along the Walters Road Extension alignment, and the planned Peabody Road bridge in its currently planned configuration); the new Fairfield/Vacaville Train Station, commuter rail service changes, bus service improvements, and trail extensions.

#### 4.14.3.2 Travel Demand Model Refinement and Validation for Study Area

Fehr & Peers will complete the following tasks to prepare future baseline (no project) forecasts for the Fairfield Station Area Master Plan, and to develop a sub-area model that can be used to assess Master Plan/Specific Plan alternatives. Since the Solano Transportation Authority (STA) Phase II Travel Demand Model was recently re-calibrated and validated, the forecasting will be completed using the Phase II model, with refinements described below.

Data Collection

We will obtain available data for use in the calibration of the base year (2000) model within the study area. Due to the limited 2000 data that may be available, the daily and peak hour traffic counts collected will also be used to identify the reasonableness of the model forecasts.

Review of Model Structure and Input Files

We will review and modify the STA travel demand model to accurately reflect existing and planned land use and roadway network conditions within the study area. To correctly develop a subarea model, a thorough review of the model structure and input files is required.

As part of this review, we will verify the base year and 2035 roadway networks and land use inputs within the sub-area. The base year network will be compared against field observations and the 2035 network will be compared against the list of fully funded projects contained in the STA RTP. The base year land use data will be compared against census data, aerial photos, and field observations. The future year land use forecasts will be compared for consistency with City and County General Plan land use designations and available vacant land in each TAZ.

Model Refinement

The model refinement effort will focus on adding traffic analysis zone (TAZ) and roadway network detail in the sub-area that reflects the study area for the project. These limits generally extend as follows.

North – City of Vacaville southern city limit
South – SR 12
East – Meridian Road
West – I-80

We will add TAZs in the sub-area and roadway network detail so that project land use and all study roadways and intersections can be accurately represented in the model.

The sub-area model will be calibrated for the following three model steps.

- Trip Generation
- Trip Distribution
- Traffic Assignment

The trip generation model will be reviewed and refined to ensure that the model's estimate of daily and peak hour trips for the study area and for the proposed project closely match estimates obtained using empirical trip rates from local, regional, and national travel surveys or publications such as NCHRP Report 365, TRB, 1998 and Trip Generation, ITE, 2003. For trip distribution and assignment, we will verify that the trip lengths and travel paths are reasonable

within the study area. Land use, roadway network, and model parameter changes will be discussed with City staff and documented in a technical memorandum.

Model Validation

A subarea validation of the model will be conducted using static and dynamic validation tests. The static tests will use the maximum deviation, correlation coefficient, and percent root mean squared error (RMSE) criteria contained in the *Travel Forecasting Guidelines*, Caltrans, 1992. These tests will be limited to those links where year 2000 traffic count data are available. For other important study area links where we collect new traffic counts, the model results will be checked for reasonableness.

The dynamic validation tests will include the following changes to the model.

- Add lanes to a link
- Add a link
- Delete a link
- Add/subtract 100 households/employees to a TAZ
- Add/subtract 1,000 households/employees to a TAZ
- Add/subtract 5,000 households/employees to a TAZ
- Add/subtract 10,000 households/employees to a TAZ

For the dynamic tests, we will review the traffic volume forecasts to verify that they change in the appropriate direction and magnitude. The results of the static and dynamic tests will be documented and reviewed with City staff before proceeding to do Master Plan/Specific Plan forecasting.

#### 4.14.3.3 Opportunities and Constraints Analysis

Fehr & Peers will draw on the baseline data and analysis described in Task 4.14.3.1 and the refined locally validated model prepared in Task 4.14.3.2 to develop a technical memorandum describing the project site's opportunities and constraints, for EDAW's use in assembling the team's work product. The memorandum will describe the existing and projected future roadway network and vehicle-carrying capacity, existing and projected future bus and rail transit service; pedestrian and bicycle facilities, including key linkages and gaps; and freight rail movements through the Master Plan and Specific Plan area. It is understood that this is a critical-path task to allow feasible Master Plan land use alternatives to be developed.

#### 4.14.3.4 Travel Demand Forecasts

*Master Plan and Specific Plan Trip Generation*

Fehr & Peers will prepare trip generation estimates for the Master Plan and Specific Plan areas using the latest research and methodologies developed to more accurately reflect the impact that development characteristics and surrounding land use and transportation system contexts have on mode choice and trip internalization within a mixed use development area. In the past, the standard practice has been to apply the Institute of Transportation Engineers *Trip Generation Manual* vehicle trip rates, then take reductions laid out in Chapter 7 of the *Trip Generation Handbook* to reflect internal trip capture within a mixed use area. However, recent research performed by Fehr & Peers and others has demonstrated that this method often underestimates trip internalization and non-auto mode use.

Fehr & Peers has participated in a research study that has resulted in a validated trip generation calculation model that directly estimates trips by mode for mixed use developments. The model

takes into account the 7 'D's: density, diversity, design, destination accessibility, distance to transit, demographics, and development scale. Methods employing the first four of these variables have been in relatively general use for the past several years, but the methods still start with gross ITE vehicle trip generation and make reductions from there. The new method assesses all seven characteristics and directly estimates trips by vehicle, transit, walk and bike modes.

Some of the data that will be needed to perform the trip generation analysis include:

*Within the Master Plan area:*

- Population
- Employment
- Jobs/housing diversity
- Commercial vs. office building mix
- # intersections per square mile
- Population Plus Employment per square mile
- Number of transit stops per square mile
- Presence of a rail station

*Within the surrounding area:*

- Employment within a mile of the plan area
- Employment within a 30-minute trip by transit

We will compare the trip generation estimates prepared with the new methodology to estimates using the traditional methodology, as well as to estimates using the Solano-Napa Travel Demand Model rates. It is expected that the 7-D-based trip generation will be the basis for the work done in the alternatives development/sustainability analysis and for the analysis of the Draft Master Plan/Specific Plan in the environmental impact report.

*Travel Demand Model Adjustments to Reflect Effect of Project (MP/SP) Growth*

Traditionally in the Fairfield region, traffic impact studies added proposed development on top of land use growth already anticipated in the region. The traditional methodology assumes that the proposed land uses will develop in addition to the growth expected to accommodate future population and economic conditions. This results in a cumulative land use scenario that does not represent market-based conditions.

The traditional approach results in a higher regional development level that would represent conditions beyond 2025, which creates a dis-connect between the land use forecasts and planned transportation system improvements that are constrained to only those improvements that are programmed to be constructed by 2025. To develop a reasonable assessment of future transportation system needs and the impacts of an individual project, the future year transportation system and land use development should be commensurate.

The project will increase the available land area for residential and non-residential development in Solano County. Consequently, growth assumed in the STA model for 2025 conditions within Solano County will likely not develop by the same amount and in the same locations with the approval of the project. Therefore, Fehr & Peers will coordinate with the City and County to develop a land use forecasts for Year 2025 conditions to reflect growth in the region with and without the development of the project.

Land use tables and maps by TAZ will be prepared and reviewed with City and County staff to ensure the appropriate level of detail for the No Project and With Project conditions. Based on the land use, a fully funded transportation system will be implemented for the No Project condition. The With Project condition will modify the transportation system to match the proposed project.

*Future With Project Forecasts*

Refinements to the model will be made to accurately portray the Master Plan and Specific Plan land uses and roadway networks. These changes will be focused on the traffic analysis zone (TAZ) structure, land use data inputs, and roadway network. The forecast volumes will be adjusted to account for base year model error where traffic counts are available. Peak hour volumes (AM and PM) will be generated for the study locations.

#### 4.14.3.5 Master Plan Alternatives Evaluation and Sustainability Analysis

Fehr & Peers will work with the EDAW team to develop and evaluate Master Plan alternatives, providing feedback on the transportation implications of variations in development location, density, roadway connections, and other key characteristics. This task will include trip generation estimates and sketch-planning-level travel demand modeling to assess the vehicle trip generation variations related to density, roadway layout, mixed-use proposals, transit connectivity, travel demand management components, etc.

This work will be coordinated with the Master Plan trip generation task described above. A key component of this work will be the development and evaluation of a variety of on and off-site sustainable mobility measures. Initial targets for VMT (Vehicle Miles Traveled) and potential measures to achieve these targets will be identified. Some of the techniques for reducing off-site trips include:

- Multi-modal opportunities for abandoned rail spurs (shuttle, NEV, bikeways, trails, etc.)
- Rail access for rail-served industrial uses
- In-commuting by rail
- Connectivity improvements to the regional roadway and transit systems
- Master Plan, Specific Plan, and individual project-level circulation connections and enhancements beyond those in the currently planned transportation system

Fehr & Peers will work with the EDAW team as they use the SSIM tool to evaluate the effectiveness of these and other measures. Key sub-tasks are generally described below; these tasks will be revised with more detailed steps after the initial scoping meeting with the City of Fairfield.

*Develop Sustainability Scenarios – Baseline, Good, Better, Best*

We will work with the team to define a transportation strategy package associated with baseline scenario for the Master Plan area that is consistent with the land use and urban form baseline package.

We will then formulate transportation strategy packages based on input on strategy acceptability (high or medium) and oriented toward achieving, respectively, good (20%), better (30%), and best (40%) reductions in off-site traffic generation (VT) and VMT per capita, relative to an assumed 10% for the baseline scenario.

*Support SSIM Analysis of Transportation Related Benefits of Sustainability Scenarios*

As described above, we will quantify improvements in the D's associated with each sustainability package. We will provide the required information to EDAW for use in the SSIM evaluation. Good, better and best scenarios will each be measured relative to baseline scenario.

#### 4.14.3.6 Master Plan Circulation Element

Fehr & Peers will prepare the following transportation data and information necessary for inclusion in the Master Plan. We will assist the EDAW team in preparing the Master Plan Circulation element.

- A roadway circulation system indicating functional classification, street typologies, connectivity standards, target speed standards, and cross-sections including number of lanes and accommodations for all modes;
- Pedestrian and bicycle circulation plan
- Anticipated bus transit routes
- CSS design guidelines
- NEV plan and ordinance
- Station-area circulation and modal integration guidelines

#### 4.14.3.7 Specific Plan Circulation Element

Fehr & Peers will assist the EDAW team in preparing the Specific Plan Circulation Element. The element will provide policy guidance addressing the transportation and circulation improvements needed to serve the Specific Plan area. The element will include the level of detail needed to clearly describe the multi-modal improvements required to implement the Specific Plan land use plan. The element will include a roadway plan designating functional/context-sensitive classifications, a pedestrian and bicycle circulation plan, and a transit plan. The plans will include roadway and intersection lane configurations, traffic control requirements, sidewalk locations, multi-use path alignments (if applicable), and transit route extensions and potential stop locations. Design guidelines consistent with the City's General Plan and Zoning Code will be incorporated.

#### 4.14.3.8 EIR Transportation Chapter

Fehr & Peers will prepare the transportation impact chapter of the EIR on the Master Plan and Specific Plan. Key tasks include:

- Setting Preparation – Fehr & Peers will prepare the Transportation Setting, describing the existing conditions in the study area.
- Thresholds of Significance – Develop appropriate thresholds of significance for purposes of impact evaluation, using recent CEQA documents prepared by the City as a guide, along with the General Plan Circulation Element policies, and any new guidelines promulgated by the State in response to AB 32 and pending legislation such as SB 375 and AB 842 and AB 3005. This task will be performed in close consultation with City staff. Development of a multi-model LOS measure should be discussed as part of this task. This would be an optional analysis if the City is interested in proceeding.
- Future Conditions LOS Analysis – Calculate the Future No Project and Future Plus Project intersection service levels, for the intersections listed above as well as key intersections internal to the Specific Plan and Master Plan areas.

- Impact and Mitigation Measures – Identify the projects impacts on traffic, pedestrian and bicycle and transit systems, using the thresholds of significance, and develop mitigation measures where needed to reduce significant impacts to a less than significant level. The impact assessment will also generate estimates of vehicle miles traveled (VMT) by speed category for use in the air quality analysis and in the greenhouse gas emissions analysis required under AB 32. This information will be developed for the project, no project, and cumulative scenarios to allow the determination of the projects proportional contributions to changes in greenhouse emissions relative to legally required benchmarks such as 1990 and 2020. Extrapolation will be used to develop estimates for benchmark years not estimated directly in the regional model. Mitigation measures will be developed to reduce the project's impacts on vehicle trips and capacity issues as well as on VMT and sustainability issues.
- Documentation – Prepare ADEIR chapter, using the template provided by EDAW.

**Subtask 4.14.4 Environmental Impact Report Input**

**Administrative Draft EIR**
Fehr & Peers will prepare the transportation chapter of the ADEIR.

**Public Review Draft EIR**
Fehr & Peers will spend up to 16 hours preparing administrative/editorial revisions to the ADEIR Transportation Chapter, in response to the City's review of the ADEIR chapter.

**Prepare Administrative Final EIR and Response to Comments**
Fehr & Peers will spend up to 24 hours preparing responses to public comments on the DEIR. The budget may need to be adjusted based on the number and complexity of comments received.

**Subtask 4.14.5 Entitlement Coordination**

**Preparation of the Specific Plan**
Fehr & Peers will assist EDAW in preparing the Circulation Element of the Specific Plan.

**Subtask 4.14.6 Project Initiation / Plan Processing / Meetings / Coordination**
Fehr & Peers will attend up to twelve working meetings with the team and/or City staff, and up to four public hearings; **additional meetings may be added to the scope at an additional cost.**

Task 4.14 Work Products:

Background reports for internal use by project team in preparation of the Specific Plan and EIR. Certain of these background reports, such as the Phase 1 and Phase 2 ESA, will be included in the EIR Appendix.

## TASK 5: ENVIRONMENTAL IMPACT REPORT - EDAW

The extent of analysis contained in this scope of services for EIR preparation should be considered preliminary and subject to further refinement.

**Overview:**
EDAW will prepare an EIR for the proposed specific plan. The level of analysis (i.e., program-level versus project-level) may vary, depending upon the level of specificity and detail achieved

in the draft specific plan. For example, the central core of the specific plan, centered around the train station, may be planned at a high level of specificity (i.e., the primary development area). Whereas, outlying areas to the northeast may be planned with less specificity and detail. The EIR may therefore be a combined Project/Program EIR. In other words, the level of specificity achieved in the EIR will be directly commensurate with the level of detail achieved in the plan. The balance of the plan area is expected to be planned in a more generalized, less detailed manner, under the assumption that further detailed planning will occur at a later time and will be subject to further project-level environmental analysis. For these areas, EDAW will conduct a programmatic level of analysis. The project description and each environmental topic section of the EIR will identify project-level and program-level information. Thus, the EIR is expected to address the primary and secondary development areas at different levels of specificity, resulting in combined Program/Project EIR.

The description below provides EDAW's understanding of the scope of the EIR and process that will be followed by the City, based on our professional experience.

The project is expected to be developed in phases. When development applications are filed for discrete phases of development, subsequent environmental analyses of these more specific development applications will take place. The City will determine the form of environmental document required at that time, unless this is specifically addressed in a Development Agreement. We anticipate that subsequent EIRs should not be required after the NE Fairfield Station EIR is certified, assuming that subsequent phases are consistent with the project description contained in this EIR.

The EIR will address impacts resulting from project construction and ongoing operations to enable the City, other regulatory agencies with jurisdiction over aspects of the proposed project, and other interested parties to examine the overall potential effects of implementing the project. The analysis also will enable these groups to take the necessary precautions and to require the implementation of various performance standards for future phases of the project to avoid or reduce adverse environmental effects.

The analysis will address the broad, specific, and cumulative environmental effects of project implementation. The analysis also will identify performance standards (e.g., mitigation measures to protect sensitive resources, replacement ratios, specific targeted results, etc.) that would apply to all subsequent entitlement requests.

An important objective of the environmental review process will be to "take the long view" with regard to the series of entitlement requests that will follow adoption of the Specific Plan and certification of this EIR. It is important that the project description and the environmental analysis encompass as many of the future development actions as possible, so subsequent environmental analysis can be appropriately tiered and minimized.

The EIR will address impacts resulting from project construction and operation to enable the project proponents, the City, and other regulatory agencies with jurisdiction over aspects of the proposed project to examine the overall effects of implementing the proposed project. The analysis also will enable these groups to take the necessary precautions and to require the implementation of various performance standards for future projects to avoid or reduce adverse environmental effects.

The analysis will address the broad, specific, and cumulative environmental effects of project implementation. The analysis also will identify performance standards (e.g., mitigation measures

to protect sensitive resources, replacement ratios, specific targeted results, etc.) that would apply to all subsequent entitlement requests (i.e., tentative subdivision maps, and improvement plans) in the plan area. Additionally, the EIR will address the impacts of a buildout year to be determined for the project-level portion of the analysis.

An important objective of the environmental review process is to enable other agencies to utilize the EIR for specific actions. One such action will be the annexation process that is under the authority of Solano LAFCO. As such, EDAW will coordinate with LAFCO staff to ensure that the analysis suits LAFCO needs for processing the annexation of the plan area to the City of Fairfield.

### TASK 5.1 NOTICE OF PREPARATION / PUBLIC SCOPING

Because the City has determined that the project will require a full-scope EIR, EDAW proposes to prepare only a Notice of Preparation (NOP) for the proposed project, thus skipping the optional step of preparing an Initial Study. The NOP will adhere to the content requirements set forth in CEQA Guidelines, including information describing the project, its location, and probable environmental effects. EDAW will gather and review existing information, including project information and any background studies prepared by others. Appropriate resource specialists will visit the project site and conduct informal consultation with Responsible and Trustee agencies to ensure the NOP fully addresses available information and anticipated project impacts. (If requested by the City, EDAW will prepare an Initial Study at additional cost.)

EDAW will coordinate and assist the City in conducting a public scoping meeting. The preferred alternative plan, as described in the NOP, will be presented at the scoping session along with a brief overview of the probable environmental effects of the preferred plan. A summary of probable environmental effects of each of the alternative plans will also be presented. For budgeting purposes, this task assumes one scoping meeting. Input provided by agency staff and the public at the scoping meeting will be documented and addressed in the impact analysis of the EIR, as appropriate. We strongly believe in soliciting comments about potential environmental issues early in the process. To have an effective and wide-reaching solicitation and participation in the public scoping meeting, we will work with City staff to identify relevant organizations, including environmental organizations that could have an interest in the proposed project and EIR.

Comments received during the 30-day public review period will be used to finalize the scope of the EIR. EDAW will review and list all comments and determine whether any issues require a modification to the scope of services. The list of comments received will be provided to the project team.

### TASK 5.2 FORMULATION OF ALTERNATIVES

The alternative land use concept formulation process will be highly collaborative among City staff, the project proponent, and the EDAW EIR and Master Plan teams. Alternatives will be largely based on the results of the opportunities and constraints analysis described in Task 4.

EDAW will develop a reasonable range of alternative land use diagrams to analyze in the EIR. Up to four alternatives will be analyzed, including the no project alternative. The factors listed in Task 4 will play a key role in guiding the selection of the alternatives that are analyzed and in selection of the preferred alternative. Sustainable practices, which include water and energy

use, vehicle miles traveled, greenhouse gas emissions, and other factors, will be included. Each of the alternatives will be "tested" and "vetted" based on the topics described in Task 4, with the objective of identifying the land use concept that has the least impacts while meeting identified objectives of the specific plan.

Alternatives are typically identified during the environmental analysis as a means of avoiding significant impacts. The alternatives formulation process will not be concluded at the beginning of the EIR process; rather, alternatives will remain somewhat fluid to allow for further adjustment as the environmental analysis of the preferred project proceeds.

The alternatives chapter of the EIR will also discuss alternatives that were considered but eliminated from further consideration.

### TASK 5.3 ADMINISTRATIVE DRAFT EIR

Each environmental topic of analysis in the EIR will include sections for existing setting, thresholds of significance used to determine the level of significance of any given impact, an analysis of project-related impacts, and mitigation measures to avoid or reduce significant impacts. To the degree possible, thresholds will be based on the City's General Plan and the General Plan EIR, as well as Appendix G of the State CEQA Guidelines. Each resource section of the EIR will include a summary of relevant Fairfield General Plan policies that could avoid or reduce significant environmental impacts. Thresholds of significance should be reviewed and accepted by City staff before beginning the environmental analysis.

It is anticipated that the following issues will be addressed in the EIR, all of which are summarized in Task 4:

- Agricultural Resources
- Air Quality
- Biological Resources (botanical, wildlife, wetland resources, and fisheries)
- Cultural Resources
- Earth Resources (geology and soils, mineral resources and paleontological resources)
- Greenhouse Gas Emissions and Global Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population, Employment, and Housing
- Public Services (law enforcement, fire protection, schools, parks and recreation, and solid waste)
- Transportation
- Utilities and Service Systems (water supply, wastewater disposal, electricity, natural gas, and communications)
- Visual Resources

### Growth-Inducing Impacts

In accordance with Section 15126.2(d) of the State CEQA Guidelines, EDAW will prepare a chapter that evaluates the potential growth-inducing impacts of the project. Potential sources of growth inducement and their impacts, such as removal of obstacles to growth, will be analyzed qualitatively to the extent they are applicable. “Growth-Inducing Impacts” will be included as a separate section within a chapter entitled, “Other Statutory Requirements.”

### Irreversible and Irretrievable Commitment of Resources

EDAW will identify any irreversible and irretrievable commitments of resources that would be involved in the proposed project should it be implemented. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects this use could have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural resource). This section will be included as a separate section within a chapter entitled, “Other Statutory Requirements.”

### Significant and Unavoidable Impacts

EDAW will summarize significant and unavoidable adverse impacts associated with the proposed project, consistent with the State CEQA Guidelines Sections 15126.2(b) and (c). Included in the discussion will be any impacts that can be partially mitigated, but not to a level that is less than significant. Any mitigation measures eliminated from consideration because of new impacts associated with their implementation also will be discussed. “Significant and Unavoidable Impacts” will be included as a separate section within a chapter entitled, “Other Statutory Requirements.”

### Cumulative Impacts

Based upon projects identified in the General Plan EIR and an updated list of projects provided by the City, the “Cumulative Impacts” chapter will contain the cumulative impact methodology, contributing projects and growth plans and projections, list of related projects, cumulative context, and cumulative impact analysis for each resource area identified in the “Environmental Setting, Impacts, and Mitigation Measures” section. The section will be consistent with Section 15130 of the State CEQA Guidelines that defines what constitutes a cumulative impact under CEQA, provide a summary of the projects that are contributing to cumulative impacts, provides the cumulative context, and lists related projects.

Task 5.3 Work Products: ADEIR, 10 copies and camera-ready copy

## TASK 5.4 PREPARE PUBLIC REVIEW DRAFT EIR AND CEQA NOTICES

Upon receipt of a consolidated set of City staff comments on the Administrative Draft EIR EDAW will work with City staff to resolve any residual issues and concerns relative to the document. EDAW will then prepare a screen check version of the draft EIR for City staff approval. EDAW will then publish the draft EIR for public review, and prepare the Notice of Availability (NOA) for delivery to the State Clearinghouse. It is assumed that the City will be responsible for publishing the NOA in the newspaper of record. This task includes attendance at a public hearing on the Draft EIR.

**TASK 5.4 WORK PRODUCTS:** Screen check draft, 3 copies

Draft EIR, 40 copies, camera-ready copy, 10 labeled CDs with pdf files

### TASK 5.5 PREPARE ADMINISTRATIVE FINAL EIR AND RESPONSES TO COMMENTS

EDAW will prepare an administrative final EIR with written responses to comments received on the publicly circulated draft EIR that raise significant environmental issues and submit for City review. The final EIR will consist of comment letters, responses to comments, and draft EIR errata pages indicating text changes in underlining for additions and strikeouts for deletions, with notations to the relevant response to comment.

EDAW will coordinate with City staff to review written comments on the draft EIR and comments from public meetings/hearing and develop a strategy and framework for responding to public comments. The comment letters, responses to comments, and EIR text revisions will be reviewed by EDAW for CEQA compliance before submittal of the administrative final EIR to the City.

Responses that are within this scope and budget consist of explanations, elaborations, or clarifications of the data contained in the draft EIR. Out of a total of 388 hours shown in task 5.5, EDAW has established a budget of 300 hours of staff time for responses to comments.

Task 5.5 Work Products: Administrative Final EIR, 5 copies

### TASK 5.6 PREPARE FINAL EIR

EDAW will revise the Final EIR based on City comments and will prepare the Final EIR for submittal to the City for review.

### TASK 5.7 MITIGATION MONITORING AND REPORTING PROGRAM

EDAW will prepare a Mitigation Monitoring and Reporting Plan (MMRP) in accordance with Section 15097 of CEQA. It will be consistent with City of Fairfield requirements and tailored specifically to the proposed project. The MMRP will be prepared to: define the roles and responsibilities of MMRP participants; establish timing of monitoring / reporting plan; identify monitoring / reporting actions and develop a checklist; assign enforcement responsibility; and designate and assign penalties for noncompliance.

### TASK 5.8 CEQA FINDINGS AND STATEMENTS

EDAW will prepare draft and final written CEQA findings in a standard format for final City action on the project. Findings will be prepared for each significant impact of the project, describing the disposition of the impact and the status of mitigation. The findings will be written such that they represent a “decision” package for the project approval process. If any impacts are found to be significant and unavoidable, a statement of overriding considerations will be prepared describing why the project should be approved despite the occurrence of such impacts.

### TASK 5.9 PROJECT MANAGEMENT, COORDINATION AND MEETINGS

The EIR Project manager will attend 18 City/team/Property Owner meetings, 2 joint CC/PC study sessions and 5 public hearings (3 PC and 2 CC). LAFCO and ALUC meetings are included. comments from City attached for other meetings.

# TASK 6: SPECIFIC PLAN

## TASK 6.1 PREPARATION OF THE SPECIFIC PLAN - EDAW

The following tasks shall be accomplished as part of the Specific Plan document preparation:

### Subtask 6.1.1 Project Initiation

**Kickoff Meeting**
EDAW specific plan team will initiate a kickoff meeting with the City of Fairfield to verify the scope and goals of the project. EDAW will refine work program and identify additional needs to adequately complete the Specific Plan document. A consensus on project schedule and milestone dates will be established with the City. The Specific Plan expectation will be discussed and direction for the vision and guiding principles verified.

**Baseline Data Collection and Evaluation**
EDAW will gather and evaluate existing data and information for the Specific Plan and the project area. The data will include, but will not be limited to the following:

- Fairfield General Plan and Zoning Ordinance
- City of Fairfield approval process, requirements and procedures for specific plans
- All other plans related to the project area
- Background reports pertaining to the project area and the existing Fairfield Station Area Specific Plan

Task 6.1.1 Work Products:
- Refined/verified work scope and project schedule. Digital version will be provided to the City.

### Subtask 6.1.2 Development of the Specific Plan Document

**Screencheck Draft Specific Plan**
EDAW will prepare the Specific Plan at a level of detail appropriate for the Specific Plan process and subsequent approval. The Specific Plan will incorporate flexibility to respond to future market conditions and unforeseen changes. The Specific Plan will be a document that articulates the project concisely through text, photos, and graphics and prepared in accordance with California Government Code Sections 65450 to 65456.

The Screencheck Draft Specific Plan will be prepared for review by the City and project team. The document will involve two (2) redrafts based upon the City of Fairfield staff input before public draft submission. Upon final adoption of the Specific Plan, EDAW will prepare a final version of the document.

The following is a general outline of the various components of the proposed Specific Plan document, subject to further refinement by the City.

1. Introduction and Summary – EDAW will prepare an Introduction and Executive Summary section that will include the introductory setting for the Specific Plan, a Vision and Guiding Principles and a Project Description Summary.

This section will also describe, in summary, the overall purpose and function of the Specific Plan including the planning process involved in developing and approving the Specific Plan. A statement of existing and proposed ownership and existing and proposed zoning will also be included in this section.

2. Project Site and Context - EDAW will prepare a Project Site and Context or Existing Conditions section that summarizes baseline conditions and environmental setting for the project. The purpose of this section is to provide the reader with contextual and existing conditions information on the project. Project location and regional context will be provided as well as the relationship to the City and other cities in the vicinity of the project and the surrounding land uses.

   The graphics in this section will show the site topography. Additionally, the relationship with the adjacent and surrounding land uses will be shown.

3. Project Description / Development Plan Components - EDAW will prepare a Project Description / Development Plan Components section that will describe the Project in detail and outline the different components, including:
   - Land Use Plan (land use types and distribution – residential, non-residential, and open space, additional information, as appropriate)
   - Housing Plan (number and types of dwelling units, parcel sizes, additional information, as appropriate)
   - Circulation Plan
   - Infrastructure Plan (water supply, sewage disposal, storm drainage)
   - Parks / Recreation / Open Space Plan (public and private)
   - Utilities Plan (solid waste disposal, electricity, cable, telephone)
   - Public Services Plan (fire protection, police protection, schools)
   - Noise Plan
   - Public Safety Plan
   - Sustainability / Ecological Conservation Plan

4. Design Guidelines – EDAW, in conjunction with the architect and EDAW's landscape group will prepare specific plan level design guidelines that will provide guidance for the overall theme and design for the project. The guidelines will describe overall architectural theme for residential, commercial, office, and public facilities. Additionally, this section will describe entry monumentation, public arts, streetscape, furnishings, and overall imagery.

5. Development Standards – EDAW will prepare the development standards that adequately describe the permitted land uses, setbacks, height limits, density transfers, parking and other development standards tailored to the uses identified in the land plan. This section will describe deviations from the standards of the Zoning Ordinance and Subdivision Ordinance. EDAW's in-house land planning team will provide the necessary support and expertise in preparation of this section.

6. Implementation and Administration– EDAW, in coordination with our in-house economic planners will prepare an implementation strategy that will efficiently describe all the pieces required to implement the Specific Plan. This section will also discuss the overall schedule and phasing of the project, including timing and the relationship between the phases. This section will also provide an overview of the proposed approach to public facility financing.

Additionally, the entitlement process will be described in detail along with development review and applications, compliance and enforcement of the Specific Plan, and other measures that administer the Specific Plan.

7. Appendices – The appendices to the Specific Plan document will include a glossary and other components deemed necessary by the City.

**Landscape Design Guidelines (Input to Specific Plan) – EDAW Irvine LS Studio**
EDAW will prepare the descriptive text and images for the Landscape Architecture Section of the Specific Plan. The exhibits for the Design Guidelines are anticipated to be diagrammatic in character and color-rendered. Exhibits are to be prepared digitally with Adobe and In Design software.

1. First Draft Design Guidelines – prepare the first draft of the Landscape Design Guidelines. This information will be based upon the exhibits developed for the Master Landscape Plan.

2. Second Draft Design Guidelines – if necessary and based upon the review comments of the City, prepare revised text and images for the Landscape Design Guidelines.

3. Final Draft Design Guidelines – if necessary and based upon the review comments of the City, provide minor revisions to the text and images for the Landscape Design Guidelines.

Work Products:
- Introduction
- Community Context
- Neighborhood Landscape Character and Design Concepts
- Parks and Recreation
- Walls and Fencing
- Irrigation Standards
- Community Plant List
- Site Furnishings
- Site Lighting

**Final Draft Specific Plan**
Upon receipt of comments from the City of Fairfield staff, EDAW will incorporate revisions and modifications into the document and prepare the Final Draft Specific Plan.

**Final Specific Plan**
The Final Specific Plan will be prepared with comments from Planning Commission and City Council subsequent to public hearings.

Task 6.1.2 Work Products:
- Five (5) paper copies and one (1) digital copy of the Screencheck Draft Specific Plan for each City review
- Five (5) paper copies and one (1) digital copy of the Draft Specific Plan for each City review
- Fifteen (15) paper copies and one (1) digital copy of the Final Draft Specific Plan
- Fifteen (15) paper copies and one (1) digital copy of the Final Specific Plan
- The above includes camera ready art-work for the draft and final Specific Plan

**Subtask 6.1.3 Specific Plan Meetings / Project Coordination / Public Hearings**

**Project Management / Coordination**
EDAW will coordinate between the Specific Plan team members and the City of Fairfield staff on an on-going basis. Additionally, the Specific Plan team will organize and convey all information to the EIR team for consistency between the two documents. EDAW will attend meetings and/or conference call with the EIR team, as appropriate.

**Team Meetings**
EDAW will attend up to eight (8) Specific Plan status team meetings in addition to one (1) kickoff meeting, to discuss the progress of the Specific Plan document with the City. Additional meetings will be on a time and material basis.

**Public Hearings**
EDAW will attend three (3) public hearings with the Planning Commission and two (2) City Council hearings. Additional meetings will be on a time and material basis.

Task 6.1.3 Work Products:
- Attendance at one (1) kickoff meeting
- Attendance at a total of eight (8) team meetings
- Attendance at a total of two (2) public hearings, one (1) Planning Commission and one (1) City Council

## TASK 7 OVERALL PROJECT MANAGEMENT/ COORDINATION / MEETINGS / PUBLIC HEARINGS

### Subtask 7.1 Project Management / Coordination
The EDAW over-all project manager will coordinate between the team members and the City of Fairfield project manager / staff on an on-going basis. EDAW over-all project manager will prepare meeting agendas in advance and minutes of meetings to record decisions and next steps. Additionally, the EDAW PM will organize and convey pertinent information to other team members for consistency (6 hours per week for 100 weeks).

### Subtask 7.2 Kickoff meeting/site visit and City / Team Meetings
The EDAW PIC and project manager will attend up to thirty-one (31) Project status team meetings with the City and other consultants to discuss the progress of the Master Planning, SP and EIR process in addition to one (1) kickoff meeting and site visit. We are assuming that City/team/property owner meetings will occur periodically on the same day as City/team meetings. Consultant team conference calls / meetings will occur periodically and are budgeted under Task 7.2

### Subtask 7.3 City Council / Planning Commission Joint Study sessions
During the early stage of concept development, project team representatives will meet in joint study sessions with the City council and Planning Commission to review concept alternatives, receive their input and direction to expedite the over-all process. Four joint study sessions are anticipated. We will start with initial “big idea” concepts and a subsequent review of up to two levels of refinement.

### Subtask 7.4 Airport Land use Committee (ALUC) meeting
Assist in the organization of one meeting with the above organization and participate in presentation of information. Provide appropriate presentation materials to demonstrate how the

draft Specific Plan conforms to the Airport Land Use Compatibility Plan with respect to land uses and persons per acre and record minutes highlighting key issues and action items

**Subtask 7.5 Solano County Local Agency Formation Commission (LAFCO) meeting**
Assist in the organization of one meeting with the above organization and participate in presentation of information. Provide appropriate presentation materials and record minutes highlighting key issues and action items.

**Subtask 7.6 Public Hearings / Meetings**
EDAW will attend two (3) regular Planning Commission meetings and (2) regular City Council meetings. In addition EDAW will attend (1) Airport Land Use Committee (ALUC) meeting and (1) LAFCO meeting. **Additional meetings will be charged on a time and material basis.**

**Subtask 7.7 Project Team Conference Calls**
Participate in periodic conference calls as needed with selected consultants to cover issues, questions etc. Assume thirty-one (31) conference calls @ 1 hour each

Task 7.0 Work Products:

- Project management and coordination ( 4 hours / week – 100 weeks)
- Attendance/participation at a total of thirty one (31) city / team meetings
- Attendance/participation at a total of two (2) joint CC/PC study sessions
- Attendance at one (1) each meetings with ALUC and LAFCO.
- Attendance at a total of five (5) public hearings, three (3) Planning Commission and two (2) City Council
- Set up and lead up to 31 team conference calls to discuss specific subjects / issues